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Western Mining in the Twentieth Century Series

THE KNOXVILLE MINING DISTRICT, THE McLAUGHLIN GOLD MINE, NORTHERN CALIFORNIA, 1978-1997

Volume V

William Kritikos	OPERATOR, OAT HILL MINE
Jack Landman	RANCHER, MORGAN VALLEY
Roberta Lyons	JOURNALIST AND ENVIRONMENTALIST
Roger Madsen	HOMESTAKE MECHANICAL ENGINEER
Beverly Magoon	MERCHANT AND CRAFT INSTRUCTOR, LOWER LAKE
Edward McGinnis	WORKER AT THE REED MINE

With an Introduction by
Duane A. Smith

Interviews conducted by
Eleanor Swent
in 1994, 1995, 1996, and 1997

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William Kritikos (1922-1995), civil engineer, Oat Hill Mine operator, 1955-75: discusses mining waste dumps, beneficiation of mercury ore, reprocessing wastewater, marketing cinnabar in China. John Landman (b. 1915), rancher: discusses ranching in Morgan Valley, working for Reed mercury mine in WWII, detrimental impact of McLaughlin mine on ranching. Roberta Lyons (b. 1951), journalist, environmentalist: discusses growing up in Lake County, 1960s; "hippies" in Colombia, 1970s; establishing Lake County Land Trust. Roger Madsen (b. 1923), mechanical engineer, Homestake Mining Co.: discusses working in Lead, SD; Grants, NM; designing pumps, let-down valves for autoclave system, McLaughlin Mine. Beverly Magoon (b. 1934), craft teacher, general store owner: discusses changes in Lower Lake commerce from 1971. Edward McGinnis (b. 1923), Napa County highway department foreman: discusses pioneer family roots in Berryessa Valley, destruction in 1956; working at Skaggs Springs and Reed mines, WWII; guarding German POWs as infantryman.

Introduction by Duane Smith, Professor of History and Southwest Studies, Ft. Lewis College, Durango, CO.

Interviews conducted by Eleanor Swent in 1994, 1995, 1996, 1997 for the Western Mining in the Twentieth Century Oral History Series. Regional Oral History Office, The Bancroft Library, University of California, Berkeley.

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THE WESTERN MINING IN THE TWENTIETH CENTURY ORAL HISTORY SERIES
1993-1999

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Mining and Metallurgical Society of America
One Shot Mining Company

Individuals

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Anonymous, in memory of Robert S. Livermore
Christine W. S. Byrd, in memory of Langan W. Swent
Kenneth S. Canfield
Rosemary and Harry Conger
Douglas W. and Margaret P. Fuerstenau
Launce E. Gamble
James and Virginia Hickey
William A. Humphrey
James Jensen
Kritikos Family, in memory of William Kritikos
John S. Livermore
Roger A. Madsen
Sylvia C. Mclaughlin
Marion Onstad
Eleanor Swent, in memory of Langan Swent
Jack Thompson
and
The J. Ward Downey Bequest Fund

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INTRODUCTION TO KNOXVILLE by Duane A. Smith

Imagine, if you would, what it would be like to have a series of interviews from people of all walks of life from a nineteenth century mining town and district--for example, a Fiddletown, California; a Silver City, Idaho; or a Caribou, Colorado. Would it not be exciting to "hear" first hand the stories of miners, store owners, lawyers, teachers, and a variety of other folks that make up the mining West?

Such a series of interviews would be the perfect answer to the Roman statesman, orator, and philosopher, Marcus Tullius Cicero, who observed more than 2,000 years ago: "History is the witness that testifies to the passing of time; it illuminates reality, vitalizes memory, provides guidance in daily life, and brings us tidings of antiquity." Imagine, then, what the Knoxville/McLaughlin oral history project is going to mean to future generations.

The Knoxville, California, mining district has a long mining history. It started in the 1860s with mercury mining and continued into the 1990s with Homestake Mining Company's McLaughlin gold mine. Under the guidance of Eleanor Swent, and as part of the Regional Oral History Office's Western Mining in the Twentieth Century series, a comprehensive oral history project of this mining district was launched in 1993. These fascinating and significant volumes are the finished projects.

While obviously impossible to go back beyond the turn of the century, interviews were conducted with miners, ranchers, journalists, teachers, and merchants who were in the district before the arrival of Homestake. The words of these people provide an exciting look at a district in transition and decline. Then came Homestake and their world changed.

Some gold mines had been operated here in the nineteenth and twentieth centuries, but they were nothing like what occurred when a major mining company became interested. Homestake's geologists found enough gold to warrant development. The concept would be an open pit mine and mill that would impact Napa, Lake, and Yolo Counties in northern California for a generation and provide for the future.

Five and one-half years went into planning for the McLaughlin gold mine, including 327 approvals needed for the mine's development. Not only were some mining ideas new and ground breaking, but the operation was sitting in one of the most environmentally aware states in the country. Homestake spent over $283 million in start-up costs, before mining commenced in March 1985. The first year's production of 83,836 ounces of gold showed that the planning and work had been worthwhile from a dollars-and-cents aspect. Homestake was proud of its operation.

"The McLaughlin mine is the site of the first successful commercial application of the autoclave processing technology for extracting gold from ores. The operation began production in 1985 and is a showcase for environmental responsibility."

Homestake would continue to mine the pit into 1996 when mining ceased, except for processing previously stockpiled lower-grade ore to be worked for approximately another eight years, "using a conventional direct cyanide leach process." Reclamation, which has been conducted simultaneously with mining, would also continue into the next century. As Homestake's annual report in 1995 stated, "Reclamation of mine waste dumps is scheduled for completion in the latter part of 1996 with the final placement of top soil and hydroseeding. The planting of oak trees and other indigenous vegetation will continue seasonally until the area is completely reclaimed."

All this makes the oral history project that much more exciting; it was conducted while the district still operated and memories were fresh and riveted on a host of topics and concerns. This multi-volume series covers almost every conceivable aspect and impact--it is a monument to a refreshing, innovative way of approaching mining history.

These volumes provide a case study of twentieth century mining, environmental issues, and regional concerns, the successes, failures, tensions, and developments that go to make up a 1980s and 1990s mining operation and the people involved from all walks of life. They are a gold mine of primary documentation and personal memories of an era that is passing into history. A perusal of the table of contents will give the reader an idea, but the interviews need to be "assayed" carefully to grasp the whole story of what went on at the McLaughlin mine and why its impact was so significant. This is a "high grade" effort all the way.

Cicero would be proud. These volumes do illuminate reality, vitalize memory, and provide guidance in daily life. Without question, they testify to the passing of time and will eventually bring "us the tidings of antiquity."

Duane A. Smith
Professor of History and
Southwest Studies

September 1997
Fort Lewis College
Durango, Colorado

PROJECT HISTORY--Knoxville District/McLaughlin Mine Oral History Project

The development of the McLaughlin gold mine in the Knoxville District of Napa, Lake, and Yolo Counties in California in the last quarter of the twentieth century was a historically significant event. The mines of the district had been major producers of mercury since 1861. In 1888 an official report by G. F. Becker on the quicksilver deposits mentioned the presence of free gold which could be obtained by panning. It took almost a century before this knowledge could be acted upon when Homestake Mining Company signed an agreement with James William Wilder, owner of the Manhattan Mine, in 1978.

Advisors to the oral history series on Western Mining in the Twentieth Century[1] who were also Homestake directors, Professor Douglas Fuerstenau, principal faculty advisor, Clifford Heimbucher, and John Kiely, all urged the Knoxville/McLaughlin oral history project, as did advisor Sylvia McLaughlin, widow of the Homestake chairman for whom the mine was named. It was decided it should be a community oral history, in contrast to the previous volumes in the series which documented individual careers.

The five historically important aspects are: the history of the Knoxville mercury mining district, with its periodic booms and busts; the effects of a large industrial development and influx of technically trained workers in an economically depressed rural area; the efforts to obtain permits to develop a mine near a center of environmental activism; the continuous pressure oxidation system which was pioneered at the McLaughlin processing plant; the reclamation of the mine site. The life of the McLaughlin mine was projected to be about twenty years, and most of the key players were available for interviews. It is a nearly unique opportunity to document the discovery, development, and closing down of a mine while it is happening.

The history of the Knoxville District begins in 1861 with the incorporation of the Redington quicksilver mine, also known as the XLCR or Knoxville mine, then employing as many as 300 men. The town of Knoxville had thirty or more buildings, including a store, hotel, postoffice, Wells Fargo office, school, and cemetery. In 1872 the state legislature transferred prosperous Knoxville Township from Lake County to Napa County, although it is separated from the Napa Valley by mountain escarpments. Lake County was compensated with a one-time payment of $3500.

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[1] Information on the Western Mining in the Twentieth Century oral history series appears in the Appendix, page 277.

In 1869 Knox and Osborne opened the Manhattan Mine on the same lode as the Redington. The Oat Hill or Napa Consolidated Mine was opened in 1872. A report on the metallurgy of quicksilver issued by the Department of the Interior in 1925 says, "In 1874, the Knox continuous shaft-furnace for the treatment of both fine and coarse ores was first used in California." [Bulletin 222, p. 5] The Knox-Osborne design was further augmented by a fine-ore natural-draft furnace developed by mine superintendent Charles Livermore. The district prospered until 1905, for a decade around World War I, and from 1927-1936. Demand for mercury rose during wartime because it was used as a detonator for explosives.

Knoxville was linked by road through Sulphur Canyon with the town of Monticello in fertile Berryessa Valley. Farmers descended from early Scots settlers grew pears, prunes, wheat, and barley and occasionally worked in the mercury mines. After World War II, when California's population was growing rapidly, a dam was built which by 1956 flooded the valley to create Lake Berryessa. It attracted vacationers, and for most of them it was the end of the line. The unpaved road from Lake Berryessa to Knoxville was impassable when rains filled the creek bed. In the other direction, from Knoxville to Clearlake, there was a similar little-used road through Morgan Valley.

Although it is only a few miles from the densely populated San Francisco Bay Area, in 1978 Knoxville township had few telephones, surfaced roads, or bridges. Populated by ranchers, miners, seasonal hunters, and outlaws, it was one of the most economically depressed regions in California, with high unemployment. In 1991, Napa historian Robert McKenzie called it "truly the last frontier of Napa County."

The chronology of the McLaughlin Mine is as follows: in 1961, following publication of a Professional Paper by USGS geologist Ralph J. Roberts, Newmont geologists John S. Livermore and J. Alan Coope found a major deposit of micron-sized gold on the Carlin trend in Nevada. It was economic to mine because of technological advances in explosives and earth-moving equipment, and development of new methods such as heap-leaching for recovery of gold from ore. This led other mining companies to search for similar deposits of "invisible" gold.

In 1969, the National Environmental Protection Act was passed, followed in 1970 by the California Environmental Quality Act.

In the 1970s, "Bill" Wilder, principal of the One Shot Mining Company, was reclaiming batteries for Mallory Company in the furnaces at the Manhattan mercury mine. Environmental concerns had made mercury mining unprofitable, so Wilder was crushing the beautiful colored rock on his property and selling it as decorative stone. An assay from several years before had showed gold was there, but at that time mercury at $75 a flask was more valuable than gold at $35 an ounce, the official

price from January 1934, when the United States went off the gold standard, until 15 March 1968.

In August 1971, President Richard Nixon terminated the convertibility of the dollar into gold, and the price climbed to $800 an ounce in 1980. In 1977, Homestake Mining Company underwent a restructuring and embarked on a program to find a world-class gold mine. Their search revealed geology reports in their files from the 1920s which encouraged exploration at hot springs near the Knoxville mercury mining district of northern California. In 1978 Donald Gustafson, Homestake geologist, visited the Manhattan Mine at the place where Napa, Yolo, and Lake Counties meet. A drilling program revealed an epithermal gold deposit which at this juncture remains unique; no extension or replica has been found in the Great Valley geologic sequence or the Coast Range thrust which were exposed at McLaughlin.

Mining companies are familiar with developing mines in remote and rugged locations, with the attendant logistical problems. In this case, there was the further challenge of obtaining permits to develop a mine in the jurisdiction of three counties, regional and state water quality districts, three regional air quality districts, various state agencies, and the Bureau of Land Management. It took more than five years and cost millions of dollars to secure the 327 required permits which made a stack of paper more than eight feet high. In addition, the ore itself was finely disseminated, fairly low grade, and as it turned out, highly refractory. Traditional methods of beneficiation were ruled out by environmental concerns, so Homestake metallurgists developed a high pressure oxidation system, incorporating technology from South Africa, Germany, Canada, and Finland, which has now been widely copied.

The eventual design was for a mine pit with adjacent crushing plant and a five-mile pipeline to conduct slurry to a zero-discharge processing plant using a variety of technologies, including autoclaves. Reclamation in the mine and on dumps began almost immediately, and at the end of the mine's life, it will be a part of the Nature Reserve system of the University of California, for research by scholars at both the Berkeley and Davis campuses.

In 1991, the Regional Oral History Office began to explore possibilities for funding the Knoxville/McLaughlin oral history. A four-year project was outlined to include about thirty-five interviews averaging three hours each, for a total cost of $100,000, resulting in a set of volumes covering the mercury mining, the gold mining, and the resulting changes in the surrounding community. The Hearst Foundation granted $20,000 to document the gold mine, and the Mining and Metallurgical Society of America gave $6,000 to document the earlier mercury mining. Homestake and Chemical Lime Company each donated $2,000, which enabled interviewing to begin in March, 1993.

The best laid plans, however, can be changed by circumstances beyond control. One of the first names on the list of interviewees was John Ransone, Homestake's construction project director. He sent helpful background documents in preparation for a scheduled interview; however, before it could be held he died of lung cancer. The project manager for the construction company, Klaus Thiel, in the meantime had been assigned to work in Brisbane, Australia, so he could not be interviewed. Several of the other Homestake people had scattered: James Anderson to Denver, Jack Thompson and John Turney to British Columbia, David Crouch to Salt Lake City, Donald Gustafson to jobs in Namibia and Kazakhstan, Joseph Strapko to Maine. William Humphrey and Richard Stoehr both underwent major surgery. Nevertheless, interviews were conducted with these and others involved in the development and operation of the mine.

Although similar difficulties occurred on the list of community leaders, by 1996 interviews had been conducted with a county supervisor from each of the three counties involved, Napa County planners, the Lake County school superintendent, community historians and pioneers, merchants, and ranchers. Some of the most vocal opponents of the mine were also interviewed.

There is a perception that the former mercury miners are all dead, killed by mercury poisoning. In fact, Dean Enderlin, a geologist at the McLaughlin Mine and also a Napa County native and historian, helped to locate some who were remarkably healthy, and who were interviewed. Elmer Enderlin in his eighties spends summers working at his tungsten prospect in Idaho and winters in Lower Lake. Anthony Cerar, also in his eighties, at the time of interviewing still actively maintained several historic mercury mines, including La Joya and Corona. William Kritikos, operator of the Oat Hill Mine, was nearly seventy-three when he died following a stroke, but was in good health at the time of his interview. Ed McGinnis, who worked around the Reed Mine as a boy, is still active in his seventies. Bill Wilder, who owned the Manhattan Mine, is a relative youngster in his seventies and in good health in Upper Lake.

The project comprises forty-three interviews in all. Two of the interviews were completed as separate volumes in 1996: William A. Humphrey, Mining Operations and Engineering Executive for Anaconda, Newmont, Homestake, 1950-1995, and James William Wilder, Owner of One Shot Mining Company and Manhattan Mercury Mine, 1965-1981. They are bound individually. Subsequent oral histories in the project will be bound into volumes containing more than one interview, arranged in alphabetical order. Supplementary documents are included as appropriate; Volume I contains general information. It is expected that researchers will refer to the entire set for a comprehensive account of the McLaughlin Mine. The oral history of Langan Swent, Working for Safety and Health in Underground Mines: San Luis and Homestake Mining

Companies, 1946-1988, completed in 1995, not part of the project, also contains relevant information.

We are grateful to all of the interviewees for their participation. There are many others who have helped also. Homestake Mining Company has supported the project not only with funds, but also in lending the Regional Oral History Office a computer and printer, and making available for research the archival video tapes and files of newspaper clippings and news releases, as well as the environmental studies, the environmental impact report, and the environmental impact statement. Early on, a day tour of the property and box lunch were provided for a van load of ROHO staff, interested students, and faculty from the University of California at Berkeley. The conference room at the mine and the San Francisco offices at 650 California Street have been used for interviewing.

James Jensen made available his extensive files on mercury mining and processing and mercury poisoning. Anthony Cerar led a vigorous hike around the Knoxville mine site, identifying foundations of long-gone buildings and workings. John Livermore conducted a tour by jeep of the Knoxville district, and suggested the importance of the Morgan North papers at The Bancroft Library. Staff members gave help at the Napa Register, the Napa Museum, the Sharpsteen Museum in Calistoga, and the Lake County Museums in Lower Lake and Lakeport. Professor Duane Smith, mining historian at Ft. Lewis College, Durango, Colorado, wrote an introduction for the volumes of multiple interviews. Professor Greg Wheeler of Sacramento State University has given valuable advice, and staff members of the California Division of Mines and Geology Les Youngs, Ron Churchill, and Kathleen Twomey have provided photos and graphs.

The tapes of all the interviews are available for study at The Bancroft Library. The completed volumes will be available at The Bancroft Library and in the Special Collections at UCLA.

Eleanor Swent, Project Director
Knoxville District/McLaughlin Mine
Oral History Project

February 1998
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Knoxville District/McLaughlin Mine Oral History Project

William Humphrey, *Mining Operations and Engineering Executive for Anaconda, Newmont, Homestake, 1950 to 1995*, 1996

William Wilder, *Owner of One Shot Mining Company: Manhattan Mercury Mine, 1965-1981*, 1996

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, 1978-1995, Volume I, 1998

Anderson, James, "Homestake Vice President-Exploration"
Baker, Will, "Citizen Activist, Yolo County"
Birdsey, Norman, "Metallurgical Technician, McLaughlin Process Plant"
Bledsoe, Brice, "Director, Solano Irrigation District"

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, 1978-1995, Volume II, 1998

Cerar, Anthony, "Mercury Miner, 1935-1995"
Ceteras, John, "Organic Farmer, Yolo County"
Conger, Harry, "President, Chairman, and CEO, Homestake Mining Company, 1977 to 1994"
Corley, John Jay, "Chairman, Napa County Planning Commission, 1981 to 1985"
Cornelison, William, "Superintendent of Schools, Lake County" (Includes an interview with John A. Drummond, Lake County Schools Attorney)

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, 1978-1995, Volume III, 1998

Crouch, David, "Homestake Corporate Manager-Environmental Affairs"
Enderlin, Elmer, "Miner in Fifty-Eight Mines"
Fuller, Claire, "Fuller's Superette Market, Lower Lake"
Goldstein, Dennis, "Homestake Corporate Lawyer"
Guinivere, Rex, "Homestake Vice President-Engineering"

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, 1978-1995, Volume IV, 1998

Gustafson, Donald, "Homestake Exploration Geologist, 1975-1990"
Hanchett, Bonny Jean, "Owner and Editor, Clearlake Observer, 1955-1986"
Hickey, James, "Director of Conservation, Development, and Planning for Napa County, 1970 to 1990"
Jago, Irene, "The Jagos of Jago Bay, Clear Lake"
Jonas, James, "Lake County Fuel Distributor"
Koontz, Dolora, "Environmental Engineer, McLaughlin Mine, 1988-1995"

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, 1978-1997, Volume V, 1998

Kritikos, William, "Operator, Oat Hill Mine"
Landman, John, "Rancher, Morgan Valley"
Lyons, Roberta, "Journalist and Environmentalist"
Madsen, Roger, "Homestake Mechanical Engineer"
Magoon, Beverly, "Merchant and Craft Instructor, Lower Lake"
McGinnis, Edward, "Worker at the Reed Mine"

Knoxville/McLaughlin Interviews in Process:

Ingle, Hugh, Jr., "Mining Engineer, 1948-1998"
Krauss, Raymond, "Environmental Manager, McLaughlin Mine"
McKenzie, Robert, "Photographer and Local Historian, Napa County"
Moskowite, Harold, "County Supervisor, Napa County"
Onstad, Marion, "Morgan Valley Rancher, Homestake Secretary"
Parker, Ronald, "General Manager, McLaughlin Mine, 1988-1994"
Purtell, Patrick, "General Manager, McLaughlin Mine, From 1994"
Stoehr, Richard, "Homestake Vice President and Director"
Strapko, Joseph, "Homestake Field Geologist"
Thompson, Jack, "General Manager, McLaughlin Mine, 1981-1988"
Thompson, Twyla, "County Supervisor, Yolo County"
Tindell, Avery, "Capay Valley Environmentalist"
Turney, John, "McLaughlin Metallurgist: Pioneering Autoclaving for Gold"
Underwood, Della, "Knoxville Rancher, McLaughlin Mine Surveyor"
Wilcox, Walter, "County Supervisor, Lake County"

x Lake County Record-Bee

Our 109th Year in Lakeport, Ca • 20 Cents No. 29 — Wednesday, December 2, 1981

Homestake Readies Gold Mine

Midway between Clear Lake and Lake Berryessa, in the barren hills around Knoxville, drill rigs and heavy equipment continue to hammer away, collecting underground samples of a gold field estimated to be worth $1.5 billion.

The Homestake Mining Co., which has drilled some 300 exploratory holes at the site since 1979, estimates it will have to remove approximately 20 million tons of ore to get at 3.2 million ounces of gold it hopes to remove.

Jack Thompson, resident manager at the mine site, said Tuesday he anticipates finishing the exploration phase by the end of March.

"We're now moving from our exploration phase to an engineering and design process," Thompson commented.

He said the samples have been collected from the drill holes and three nine-by-10 foot mining tunnels burrowed more than 100 feet into the earth. The samples, Thompson noted, will determine the type of method used to separate the gold particles from the ore.

He estimated in 20 years Homestake will have dug 500 feet down into an open pit that will be one mile long and nearly half a mile wide.

The gold field, which lies mostly in the northeastern corner of Napa County, is partially inside the boundaries of Lake and Yolo Counties. Thompson said Homestake will probably know next month whether the processing plant will be located inside Lake County.

"It's down to two sites," the manager commented. "One of them is in Lake County. The consultants are studying it."

Although the company announced in a July report this year it would probably begin processing gold near the end of 1984, Thompson's latest estimate is that processing will begin in 1985.

While the company continues to assess the size of its gold field, governments in Lake, Yolo and Napa Counties are also preparing to assess the potential county tax revenues.

Several weeks ago, Lake County supervisors gave County Assessor Verdon Strong the go-ahead to negotiate a contract with Harold Bertholf and Associates, a Sacramento-based geology and petroleum engineering consulting firm.

Strong said last week the firm can assess the company's holdings and property better than the three county governments, which don't have the expertise.

The Lake County assessor, who notes more than 1,000 mining claims have been filed with his office in the past year, said the cost to the county could be in the range of $7,000 to $8,000 for the study.

He said, however, the final cost will be determined by the amount of gold-related value in each county.

Joe Colosi, a mineral appraiser with the Sacramento consulting firm, said Monday the firm would analyze several things about the property.

"First of all we appraise the mineral properties," he said. "Our usual work is petroleum property appraisal." Colosi said the firm would also inspect data from production reports, analyze sales and money spent for exploration and development of the gold field and analyze the reserve estimates provided to company stockholders.

"We use our expertise in mining and appraisal so they can use it for their property tax roll," Colosi said.

The mineral appraiser said negotiations are continuing with Napa and Yolo Counties. He said he hasn't yet met with anyone from Homestake Mining Co.

Thompson, Homestake's resident manager, said Tuesday from the site the company is considering five or six alternative ways of removing the gold from the ore.

He said the most likely approach would be to crush and grind the ore. They would then treat it with high heat and pressure in an autoclave, a long cylindrical steel tube containing inside agitators and lined with brick.

Thompson explained oxygen would be added to the solution under high pressure to oxidize the ore, which would then be leached to remove the gold.

Company literature on the field states the gold particles are too small to be seen with the naked eye.

He said the company anticipates filing permits to begin construction on the entire operation about mid-1982.

Regional Oral History Office
The Bancroft Library

University of California
Berkeley, California

Western Mining in the Twentieth Century Series
Knoxville/McLaughlin Project

William Kritikos

OPERATOR, OAT HILL MINE

An Interview Conducted by
Eleanor Swent
in 1994

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Since 1954 the Regional Oral History Office has been interviewing leading participants in or well-placed witnesses to major events in the development of Northern California, the West, and the Nation. Oral history is a method of collecting historical information through tape-recorded interviews between a narrator with firsthand knowledge of historically significant events and a well-informed interviewer, with the goal of preserving substantive additions to the historical record. The tape recording is transcribed, lightly edited for continuity and clarity, and reviewed by the interviewee. The corrected manuscript is indexed, bound with photographs and illustrative materials, and placed in The Bancroft Library at the University of California, Berkeley, and in other research collections for scholarly use. Because it is primary material, oral history is not intended to present the final, verified, or complete narrative of events. It is a spoken account, offered by the interviewee in response to questioning, and as such it is reflective, partisan, deeply involved, and irreplaceable.

****

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Requests for permission to quote for publication should be addressed to the Regional Oral History Office, 486 Library, University of California, Berkeley 94720, and should include identification of the specific passages to be quoted, anticipated use of the passages, and identification of the user. The legal agreement with William Kritikos requires that he be notified of the request and allowed thirty days in which to respond.

It is recommended that this oral history be cited as follows:

> William Kritikos, "Operator, Oat Hill Mine," an oral history conducted in 1994 by Eleanor Swent in *The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, 1978-1997, Volume V*, Regional Oral History Office, The Bancroft Library, University of California, Berkeley, 1999.

Copy no. _____

William Kritikos, 1955.

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INTERVIEW HISTORY--William Kritikos

William Kritikos, operator of the Oat Hill Mine from 1955 to 1980, is one of the few miners who entered the field from civil engineering with no prior connection. I met him and his wife Jacqueline at the McLaughlin Mine in May 1994 on the occasion of the celebration of the two millionth ounce of gold produced there, and he consented to be interviewed. On 25 September 1994 I drove from Middletown along Butts Canyon Road and then up to the end of the improved surface on Oat Hill Road. Their home, where we conducted the interview, is a charmingly decorated double-wide mobile home with a large flagstone patio, set on a flat among oak woods.

He graduated as a civil engineer from the University of Oklahoma, served in the army during World War II, joined a friend in a failed venture at the Rainbow gold mine in Oregon, came to California to work for nineteen years for the East Bay Municipal Utility District, becoming assistant regional superintendent, and then was a field division chief on the California Water Project. He says, "Through all of this, I was carrying on a parallel mining career. In 1955, I decided that mercury was the place to go." His oral history recounts another gold-mining failure at the Bach Mine in Hornitos, California; his extensive research and selection of a mercury mine; formation of Oat Hill Mining Company to lease the mine; how he and his family first worked there on weekends and finally moved there to work full-time.

The Oat Hill, like the neighboring Knoxville and Manhattan mines, has been a significant producer of mercury from the 1870s into the present time. It lies in the Mayacamas District, and differs from other mercury mines in the area because the mercury occurs in sandstone, not at contact with serpentinite. In the earlier years of the century Oat Hill was noted for its incompetent ground and troublesome sulphurous waters. It was acquired by Norman B. Livermore about 1922 and leased to H. W. Gould Co. in the 1930s; they operated it during the boom period of 1939-1944, replacing the historic Scott furnace with a Gould rotary furnace.

Kritikos leased the Oat Hill Extension as well as the Oat Hill, and for ten years mined the waste rock dumps, using gravity concentration and a retort to obtain mercury. Later he sold cinnabar from the open pit mine directly to Asian markets; he gives a highly personal account of visiting the Canton Trade Fair and doing business with Asians. He developed an innovative water recycling system and was also involved in waste disposal projects.

Bill met his wife when they were in college, and he pays tribute to her ability to adjust to a different life, beginning with living in a tent at eight thousand feet in Oregon:

> ...you know, when you're a girl from Bronxville, New York, Westchester County, and you live in a tent like that--do you know how tough it was? She had to get up in the morning, and go over to this 4-inch pipe, and break the ice on the end of it, get the water, bring it in, heat it up, to wash Billy's diapers....She followed me everyplace, and she has, and she just worked her butt off. So that's why she has a really nice life now, and she can do anything she wants because she had paid her dues; period, end of report. She's followed me around a lot of hell-holes; because that's where mining engineers wind up mostly.

The tapes of the interview were transcribed in the Regional Oral History Office and lightly edited. Regrettably, William Kritikos died on 2 January 1995 before he was able to review the transcript. The manuscript was indexed at our office. The tapes are deposited in The Bancroft Library and are available for study.

The William Kritikos interview is one of more than forty interviews which were conducted by the Regional Oral History Office from 1993-1997 in order to document the development of the McLaughlin gold mine in the Knoxville District of Lake, Napa, and Yolo Counties, California, from 1978-1997, as part of the ongoing oral history series devoted to Western Mining in the Twentieth Century. The Regional Oral History Office was established in 1954 to record the lives of persons who have contributed significantly to the history of California and the West. The office is a division of The Bancroft Library and is under the direction of Willa K. Baum.

Eleanor Swent
Project Director, Research Interviewer/Editor

Regional Oral History Office
The Bancroft Library
University of California, Berkeley
February 1999

Regional Oral History Office
Room 486 The Bancroft Library

University of California
Berkeley, California 94720

BIOGRAPHICAL INFORMATION

(Please write clearly. Use black ink.)

Your full name William Theodore Kritikos

Date of birth 1/18/22 Birthplace Tulsa, Okla.

Father's full name Theodore Nicholas Kritikos

Occupation Restaurant Owner Birthplace Honika, Greece

Mother's full name Zoe Vasileau Ballios

Occupation Home maker Birthplace Argos, Greece

Your spouse Jacqueline Archer Clark

Occupation Home maker Birthplace Bronxville, N.Y.

Your children William Jr. - Gary, Kurt

Where did you grow up? Tulsa, Okla.

Present community Middletown, CA.

Education Graduated from Tulsa Central H.S. and Oklahoma University - Engineering School

Occupation(s) Civil Engineer with EBMUD from 1947 to 1965 — Chief-Delta Field Division CS W.P. to 19

Areas of expertise Water Projects - Water canals - Water purification -

Other interests or activities Mining - gold - mercury-silver. Operated the Oat Hill Mine from 1955 to 1980 -

Organizations in which you are active

This biographical information has been given by Jacqueline C. Kritikos (wife)

INTERVIEW WITH WILLIAM KRITIKOS

I CIVIL ENGINEER, MINING ENTREPRENEUR, 1922-1955

[Interview 1: September 25, 1994] ##[1]

Schooling in Oklahoma, Army Service in World War II

Swent: This is Eleanor Swent, interviewing William Kritikos, in Middletown, California.

Kritikos: Actually, we call this place Rancho Cinnabar.

Swent: Rancho Cinnabar, near Middletown, California, on September 25, 1994. Let's start off with some basic biographical data--where you were born and when.

Kritikos: Yes, all right. I was born on January 18, 1922, in Tulsa, Oklahoma. Lived there all of my early life. I really hadn't gotten out of the state until I went to the University of Oklahoma and that was to go to the Oklahoma/Texas football games down in Dallas--big affairs, you know. But then I got into the army, and started traveling around a little.

I have three brothers. One of them is an engineer like myself, another one's an artist, and another one is a trucking executive.

So after I graduated from the University of Oklahoma, I went right into the army as a combat engineer--

Swent: And you studied engineering, you said?

Kritikos: Yes, I graduated in engineering from the University of Oklahoma--civil engineer--in 1943. Served in the army. I got out of the combat engineers in World War II. I decided to go into mining rather than stay into civil engineering. The

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[1]## This symbol indicates that a tape or tape segment has begun or ended. A guide to the tapes follows the transcript.

professions are not all that different. If you forget about the metallurgy part, and a little bit of geology, there's a lot of similarity between the two professions.

Swent: What made you think of it, though, in Oklahoma?

Kritikos: Well, I met a mining engineer--a graduate of the Colorado School of Mines at Golden--and his father was a professor at the Colorado School of Mines and he was a pioneer there.

Partner Arnold Goody

Swent: What was his name?

Kritikos: His name was Goody. The mining engineer's name--the fellow I met--was Arnold Goody. His father was one of the pioneer teachers out there and he taught flotation at the Colorado School of Mines when flotation came in as a metallurgical beneficiating method about that time when the old man was at the Colorado School of Mines. His son knew a lot about mining not only from having graduated in that, but having a father who taught in that field. His father, I guess, during all those weekends that he had off while he was teaching, would pick up the family and they'd go look at all the mines in Colorado, so he had a first-hand knowledge of all the mines in Colorado. His son got the same thing.

What impressed me about Arnold Goody was his ideas on what to do. He had some very, very good ideas about the future of mining, particularly for an entrepreneurial type like myself or himself. Mining is a high-cost business and normally you don't go into it unless you have a lot of money someplace. So anyhow, I liked Goody's ideas, so we went into mining. We set up a partnership, and--

The Rainbow Mine, Durkee, Oregon

Swent: You and he together?

Kritikos: Yes. We set up a partnership with some other people who had made a lot of money in Oregon logging during World War II; a

lot of wood was used then, and so the Fisher brothers made a lot of money in logging in World War II. We went to this old mine--it was the second-largest mine in the state of Oregon--the Rainbow Mine. It was about thirty miles up the canyon from a little town called Durkee, which was on Highway 30 between Baker, Oregon and Huntington, Oregon.

Swent: How did you happen to get into Oregon? Had you been there in the army?

Kritikos: Well, we spent a lot of time exploring. One of the things I learned from Arnold is how to research properties and try to pick out the one that could fit your requirements. There are a lot of good properties. For instance, if you don't have the money to pursue one, you're out of it. Or if the owner does not like you, you're out of it. Or if the owner doesn't want to lease to you, you're out of it. We researched a lot of mines in the area at the time. We were living in Tacoma because I had gotten out of the army at Fort Lewis, Washington.

Swent: And you knew Arnold in the army?

Kritikos: No, he was not in the army. He was working at some other things--Boeing and elsewhere--and that's where I met him--I met him in Tacoma. So we decided that this Rainbow Mine would be a good place to go because it had--one of Goody's ideas was: if you found a successful mine that had left a good-sized waste rock dump--for instance, like Homestake is doing now, if the price of gold someday goes to a thousand dollars an ounce, there's a whole lot of things that Homestake can do out there. That's the basic idea: any mining operation, if it's a credible outfit, retains its waste because there might be changes in technology, changes in prices, that make that a viable thing to go back after them.

Arsenopyrite: A Mistake that Led to Bankruptcy

Kritikos: So we found that the Rainbow Mine had left this large deposit of waste rock, about 400,000 tons, and it was available. Some fellow from Chicago, a general contractor, owned it and he was willing to lease it to us. So we went out there, did the testing work, verified the values, and then did the metallurgical work and we set up a mining operation there. But we went bankrupt because we made one serious mistake: the mistake was on Arnold's part, because it had to do with some

very technical aspects of metallurgy that I wasn't familiar with at the time. I should have checked it myself, but I didn't. I left the metallurgy to him, and I did all the other things like building roads, building dams, building the buildings, putting in the mill, that sort of thing. The mistake we made was that the values were there, but they were contained in another mineral called arsenopyrite. So if you designed the mill to grind the ore, to free the arsenopyrite, you weren't going to get the gold, because 80 percent of the gold was contained inside the arsenopyrite. So to reach that gold, you had to grind to a much finer mesh of grind, like three hundred mesh, whereas to get the arsenopyrite, you could do it at two hundred mesh, see? So it failed. The investors lost their money.

Jacqueline Paid Her Dues as a Miner's Wife

Kritikos: So anyhow, I had promised my wife--I'll have to show you a picture. She's a New York girl, you know. She's from Bronxville, and we met at the University of Oklahoma. I met her on a blind date. So when we got married, I think she was about eighteen and I was twenty. She didn't invite me over for the 49er games. [laughter] But anyhow, she followed me everyplace and she just worked her butt off, so that's why she has a really nice life now, and she can do anything she wants because she had paid her dues; period, end of report. She's followed me around a lot of hell-holes, because that's where mining engineers wind up mostly.

Swent: The good wife goes with them.

Kritikos: That's right. [laughter] I'm going to show you a picture of her--you won't believe this: she lived in a 16-by-16 pyramidal tent. She stuck it out. Our first-born was born up there.

Swent: At the Rainbow Mine in Oregon?

Kritikos: At the Rainbow Mine. Of course, she lived through all this, all the problems of going broke.

Swent: Where did you get your capital to start with?

Kritikos: Well, Arnold and I had a little of our own money, but these Fisher brothers had a whole lot of money so they invested with us. [laughter] So this is the tent that she lived in. [shows

photograph] This pyramidal tent. This is up at about eight thousand feet. This is Billy, our first-born. Here he is again. But you know, when you're a girl from Bronxville, New York, Westchester County, and you live in a tent like that--do you know how tough it was? She had to get up in the morning and go over to this 4-inch pipe and break the ice on the end of it, get the water, bring it in, heat it up to wash Billy's diapers.

Swent: She's a trouper. [laughter] That's really something. Well, it makes or breaks the partnership, doesn't it?

Kritikos: Sure does. So anyhow, after we went belly-up--went bankrupt there--I had to get a job real fast, because we got an infant child there; got a car with a whole bunch of payments on it; dead broke. [laughter] So we came to California and I promised her, I said, "Okay--"

Civil Engineer for East Bay Utility District and State Water Project

Swent: So this is 1947, 1948?

Kritikos: Came to California in September of 1948; September the second. I said, "I'm going to get a job as an engineer, going to provide a good living for the family, but I'm going to do my romancing and mining on the weekends. It won't interfere with taking care of the family." So that's what I did. Went to San Francisco, went to the office of a civil engineers outfit, and I said, "Hey, I'm looking for a job."

"Well," they said, "Just so happens that we have--do you know anything about laying big pipes?"

I said, "How big?"

The guy said, "This is a second Mokelumne Aqueduct for East Bay Utility District. We need an engineer in charge up there right away." He said, "I want to tell you, though, it's a tough job. You'll be working for some tough people. It's not the easiest thing in the world to put in, because you're in foothill country there, coming down from Pardee Dam."

I said, "Well, that shouldn't be too much of a problem." So anyhow, I went to work for East Bay Utility District; worked

with them for about nineteen years. I spent the first two years as assistant on a construction project; then I went to work for them building an outfall sewer out into the bay--a project engineer there. Then I came back and was assistant regional superintendent for ten years in Stockton. Then I went to work for the State of California, and was a field division chief on the California Water Project. Through all of this, I was carrying on a parallel mining career. In 1955, I decided that mercury was the place to go.

Swent: Why did you decide that?

Kritikos: Well, I'll tell you why: because Uncle Sam had announced a program for supporting the price of mercury at $225 a flask, because they were using mercury at that time as a coolant in the nuclear engines on nuclear power plants on the subs. So Uncle, in effect, guaranteed mercury to small producers. That's very, very important because up 'til that time, for domestic producers of mercury in the United States, the price skyrocketed up and down--the U.S. did not control the mercury price; the Almaden Mine in Spain controlled the mercury price. It had been in operation--it was owned by the Spanish government--it had been in operation since the time of Christ, and was continually in operation. So when an American mining company was mining mercury, the minute the market indicated that a price change was imminent--a drop--they would just shut the mine down and, bing, they'd walk off. That's what they did up here for the Livermores. The company that was leasing Oat Hill Mine at the time just shut it down right at the end of World War II.

Swent: Who was leasing it then?

Kritikos: I'll get it for you in a minute. I'll give you some information.

Swent: All right, okay.

Kritikos: So we decided to go for mercury because we had just finished putting in about three years of weekend effort looking at this little gold mine in Mariposa County. There was a little gold mine down there near a little town called Hornitos, which means "little ovens." Are you familiar with the place?

Swent: A little. Who do you mean when you say "we"?

Kritikos: I had a partner then, a fellow named Ward Magorian. He came up here with me to Oat Hill and stayed with me for about four

years; then we split up. But anyhow, we had just got through finishing up three years--

The Bach Mine, Hornitos: A "Poorboy" Operation

Swent: What was the name of your mine at Hornitos?

Kritikos: At Hornitos, it was the Bach. This old German named Bach, who made a lot of money running sheep--he was a sheep guy--he would pasture his sheep at Hornitos in the wintertime. He'd bring them down from the Sierra and he'd pasture his sheep there. While he was there--he had kind of a sideline interest in gold --he got perked up about this place there, this mine, because there were tales of very, very rich nuggets and stuff that were picked up by the placer-miners in the area. It's a very dry place and--God, at this time of the year, you couldn't find water within three miles of the place. So anyhow, old man Bach kept this place all the time. He was convinced that there was a big gold deposit there. I became acquainted with his son, who lived in Stockton. When we lived in Stockton, when I was assistant regional superintendent for East Bay MUD [Municipal Utility District] there on the aqueduct system, I met Bach. He talked me into this place. "This is a good place, Bill," he said, "my father knew what he was doing," and all that. So I took a look at it, and Bach had a very good idea. He was a real smart old guy, even though he didn't have too much formal education.

Here was his idea: the property there at the Bach Mine was a vein of quartz that was about twenty feet thick that had fallen over. Because of geological erosion and all, it had been sitting up here at an angle of inclination, probably, of 40 degrees. Then because of changes geologically, the thing had fallen back down. So really what you had, when you went there--you looked down on a table of quartz, it was slightly inclined, and about fifteen feet thick, and had very little overburden. So what was attractive about it was that Bach figured that he could mine the silica rock, and sell it to Kaiser because Kaiser was buying silica for fluxing purposes on some of their other mineralogical operations. It was a pretty good deal: if you could sell Kaiser the silica, and make a profit doing that, then you had a free shot at the gold. That was the basic idea. He had a good idea, so we looked at it and decided to go into it. We bought ourselves a drill rig at a

war surplus sale. It was a [U.S. Army] Corps of Engineers Calyx core-drill rig.

Using a Calyx Core-drill

Kritikos: The reason that's significant is because they were using Calyx drill bits. They used chilled shot instead of diamond bits. For instance, they would use chilled shot, like BBs, on the edge of the bit. In fact, they would feed the chilled shot down through the swivel. You know what I mean by the swivel on the drill rigs? Okay, so you'd spin away. In fact, if you go up to places in the Mother Lode, you will see samples of quartz, five feet in diameter, that they mined with chilled shot. It was strictly a "poorboy" operation because we didn't have to put a lot of money into diamond bits, which are very, very expensive. So we bought this surplus drill rig, we found out how to run it. We did a lot of drilling on top of this quartz. It wasn't anything particularly exquisite, just hard work, hard work. We drilled a lot of cores and then I did the laboratory work myself in Stockton.

I knew the guy there that ran the San Joaquin Research Lab. He was buying sugar and he was producing glucose compounds and peddling them to the American government. He got in touch with me one day because he wanted me to come in and design a filter for him. He was trying to "poorboy" the thing. And so I said, "Okay, I'll design the filter, but what I want in return, I don't want you to pay me, I want to use your lab facilities to do the laboratory work I have to do, and every now and then I'll give you some samples to save for me." He was a fellow from Colorado, and he was kind of a gold bug himself, so this kind of intrigued him. So it worked out--a real good relationship with the old man. Old Man Profitt. Crackerjack metallurgist. But he was making money in sugar because he was selling glucose compounds to the federal government for the troops over there in Korea.

So I did all the metallurgical work. We were trying to find out: okay, if we can mine this ore body of silica, sell the silica to Kaiser.

Swent: Which Kaiser were you selling it to?

Kritikos: Well, the outfit out of--they were headquartered then in the Kaiser building in Oakland, you know. They had a facility down on the way to San Jose--someplace down there, near the coast.

Swent: Was that Kaiser Refractories?

Kritikos: Yes, right. At the outset, it looked pretty good because I went over to visit these Kaiser people--I went up to the thirty-fourth floor, I guess--and talked to a bunch of those executives up there.

Swent: Do you remember any of the names of the men you talked to?

Kritikos: No, I don't. I got mad at them later [laughter] because they wanted to buy the mine instead of buying our ore, so they strung us along for about two years. To hell with that! We'll sell you the silica rock, we'll mine it and sell it, but the mine is ours; period, end of report. That's why we didn't make it, you know. [laughter] Anyway, we did the metallurgical work--finally worked it out; finally worked out a flotation flow sheet. Went to the smelter at Selby and said, Hey, here's what we could produce; what will you do with it? What will you charge us to run the concentrate through there?

Swent: You would have to have it smelted up there?

Kritikos: Yes. Well, what we'd wind up with was a flotation concentrate. Because it was complex, the ideal solution to it was smelting it. There's no way you could get it out by panning it, or flotation or anything like that. So Selby said, Yes, it's a go. And we had some commitments from them; it looked real good. The whole thing hinged on working out the agreement that we had tentatively agreed on with Kaiser, and those guys didn't want to buy our silica rock, even though they were running out of silica rock at another mine they had. [laughter] So I got pretty mad at them. Here we had done all this work for three years, and it was all shot. But it was viable economically, provided you could sell the silica rock. So about that time after we decided to walk off, I found out that Uncle Sam was starting to buy mercury--had set up this purchasing program.

Uncle Sam Starts to Buy Mercury

Swent: How did you find that out?

Kritikos: Well, I read the Engineering and Mining Journal continuously. I stayed abreast of what was happening.

Swent: Good old E&MJ.

Kritikos: Good old E&MJ, right. [laughter] If you go in my bedroom, I've got a stack that high of them. I'm trying to get rid of them now. Anyhow, I told Ward, I said, "Hey, this looks pretty good. We shouldn't spend any more time horsing with gold, because I don't think the fundamentals are going to change. I don't think the price of gold is going to change very quickly." It was thirty-five, you know, then. Without selling the silica rock, the thing is not viable. So let's take a look at mercury, because Uncle Sam is buying the mercury, and he's got a guaranteed price for, I forget, five years, or ten years, or something like that. Yes, let's give it a shot. I started doing some research on it. And for mercury it was very easy because, as you probably know, I guess for almost a hundred years, the State of California legislature has required the state mineralogist to issue a report to them every year, so if you go in and look at these reports, you can find what's happened in every commodity you want and every mine you want. Within reasonable limits, you can get a whole lot of information. So I started spending a lot of time researching that, and it was very convenient because the library in Stockton had one of the best sets of reports of the state mineralogist. The librarian was a wonderful gal that I got along with famously. She would help me with whatever I was looking for and if it wasn't there, she'd get it from the state library.

Swent: Do you remember her name?

Kritikos: No, I don't. [laughter]

Swent: They were open weekends?

Kritikos: Nights, too. I would go down there at night. After dinner at home, I'd go down to the library and stay there until the library closed. I'd look this stuff up. She had everything right there, and you couldn't find a better place to do the research. I did a little thinking and decided the way to do it was this: we'd have to find where the large mercury producers were historically; next thing, was anything left at these mines? Next thing, were they available? And next thing, could you work out the metallurgy on the poorboy approach we would have to take, because Ward and I had limited means. So it quickly boiled down to the fact that you're looking at three

areas in California. This is one of them right here: Lake County and Napa County. Okay, that's one of them. You had another of them down at San Jose, where the New Almaden Mine was. Then you had the other one down at San Benito where the New Idria was. So when you went through those, the other ones were pretty well occupied. Things were pretty quiet up here, so that's when I came up here.

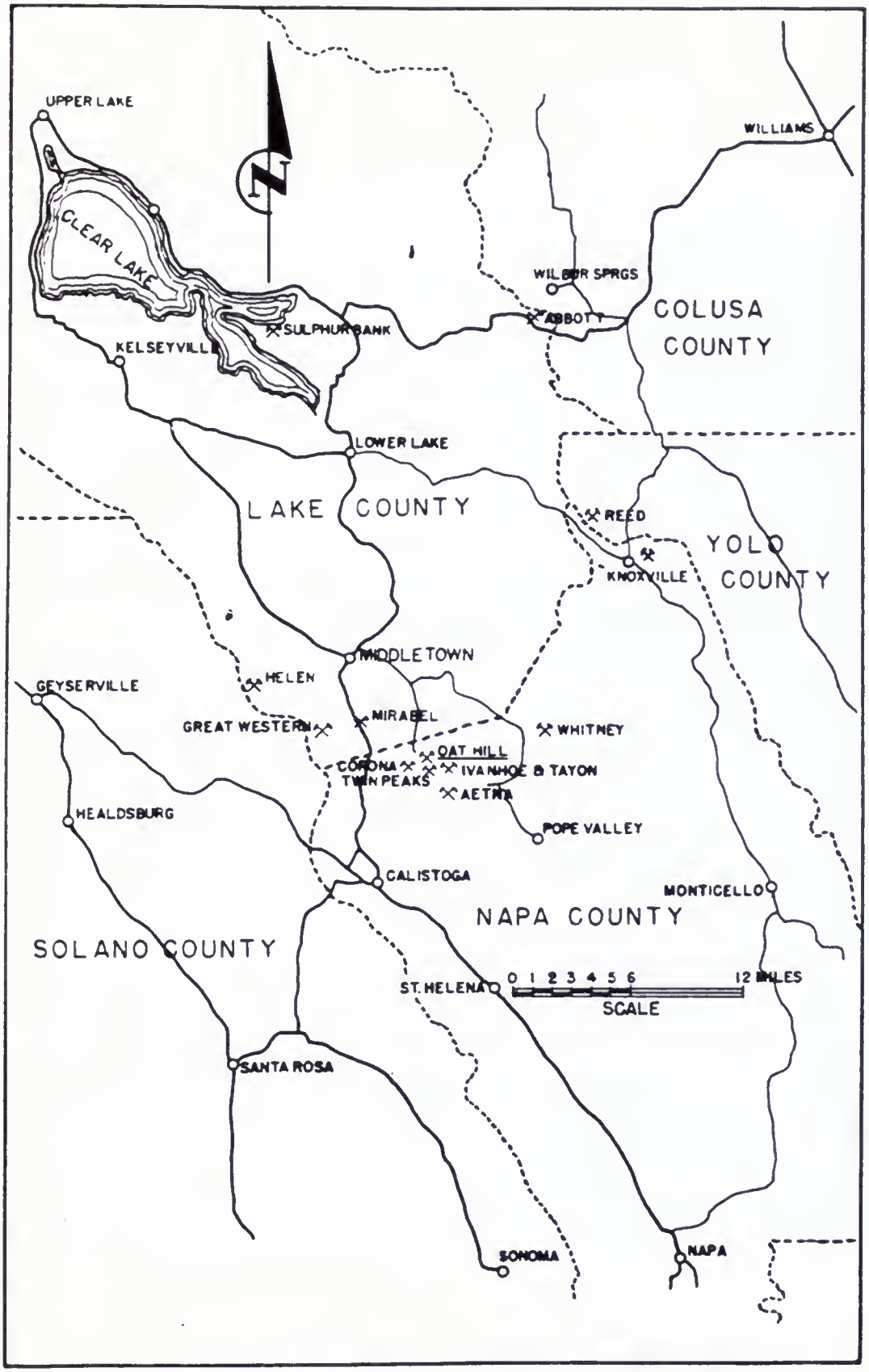

Figure 1. - Location map, Oat Hill quicksilver mine, Napa County, Calif.

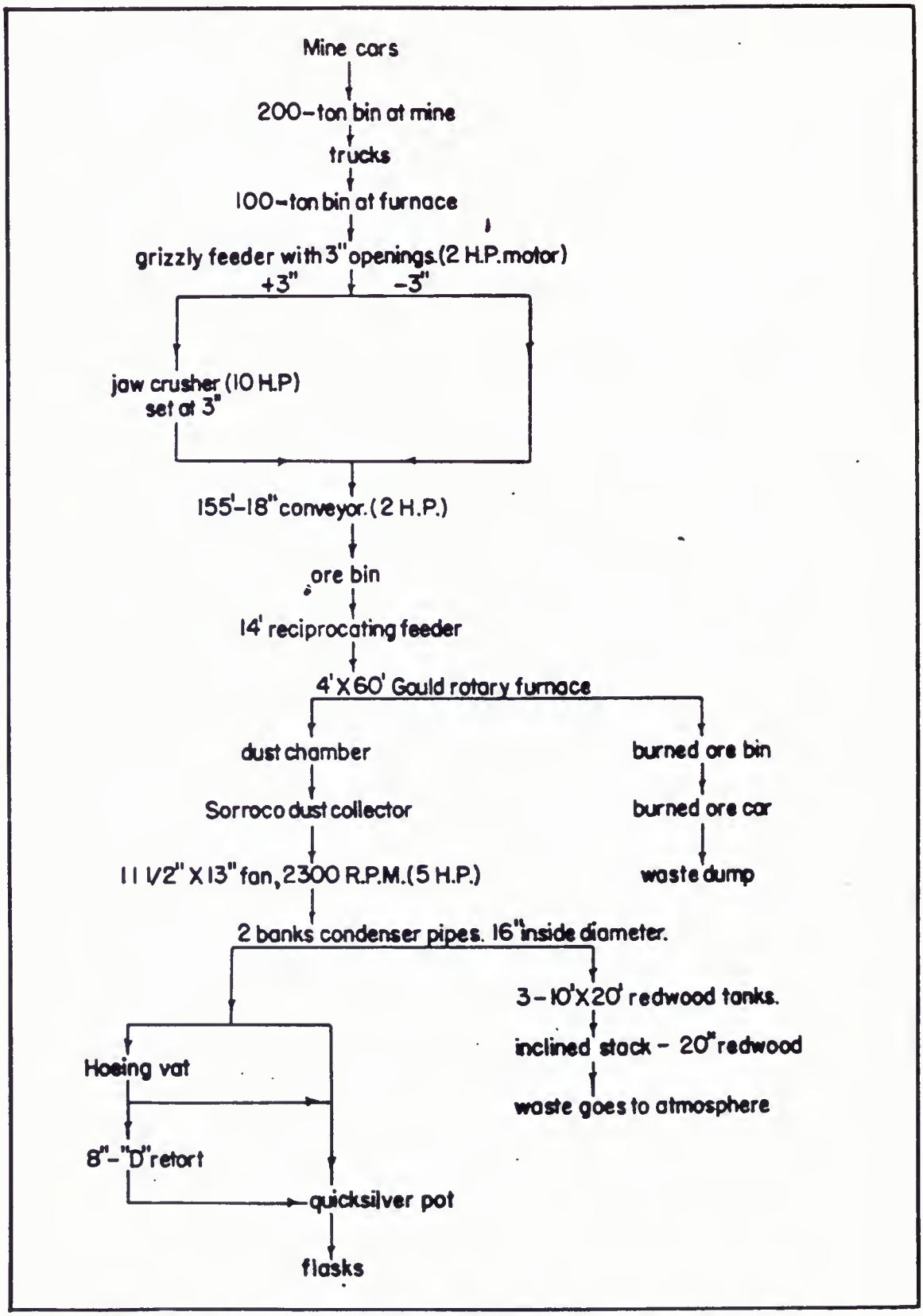

Figure 5. - Flow sheet, Oat Hill quicksilver plant.

Gary, Billy, and Kurt Kritikos at the Anderson Plant, 1957.

Anderson Plant at Oat Hill Mine.

II THE OAT HILL MINE, 1955-1975

The Oat Hill Extension and George Anderson

Swent: When did you first come up here?

Kritikos: I came up here in March of 1955. In fact, when we went over St. Helena Mountain, it was snowing. We came down here, and I was tickled pink to find that, a) there were still a whole lot of waste rock dumps left and--

Swent: You just drove around and looked at them?

Kritikos: Yes. And the records were there too--they verified it. When I came out for my first prospecting trip, I was after two questions: were dumps still there and were there any big problems to stop me from going in there? We came in that March. I got off on my map a little, and wound up on the Oat Hill Extension property, which is right below Oat Hill. I didn't know at the time, but a guy named George Anderson, who was a graduate of the military academy down there in the South--the Virginia Military Institute--he was a dis-barred attorney, and he was a mean old guy. In fact, people in town warned me, they said, "You better watch it, that guy's bad news, Bill."

I happened to get on George Anderson's property by mistake, reading the map wrong. So he comes up, "What are you doing here?" He got pretty nasty in a hurry.

So I told him to go buzz off. I said, "I've made a mistake and that's that. So get off my case."

I started to walk off, and he said, "Wait a minute, young fellow."

I said, "Okay, what?"

"Why don't you leave me your card?"

I said, "Well look, Mr. Anderson, we're not getting along very well after our first entree here. I don't think the honeymoon is going to look any better. But okay, I'll give you my card." [laughter] So I left him my card, and he wrote me about three weeks later.

He said, "I've checked you out. You've got a good reputation. You're a good engineer. I think we ought to have a talk. I think I can do something for you." Funniest thing in the world. Just shows you how life is just full of breaks. I wouldn't have bet a single penny that I'd ever see Old Man Anderson again. His son, who is now about eighty-five--he and I are the best of friends right now. Zack, his son, is very good.

But what those guys had done--I didn't know it at the time, but in the thirties Old Man Anderson was broke and he was looking for something to do. He went to the Hall of Records in Napa and found out there was some land open on the Livermore property; on Oat Hill Mine property. And here's why it was open: it hinged on a peculiarity of the law, but a very important detail. At that time, you did not pay taxes to the county on a mining claim. If the mining claims were patented, then you owned the land in fee simple. You did pay for property taxes, so if it were on the county tax rolls, it's fairly certain that it was patented land and you owned it. But if it were not, you didn't pay taxes on it. Well, the Livermores felt--the reason they were surprised--the boys' father, Norman B. Livermore, Sr.--it was one that got away from him. He thought that they owned that land down there because they were paying taxes on it to Napa County. The truth of the matter was, they should have not have been paying taxes on it because the land was open. George Anderson came in in the thirties, went to the Hall of Records, found out it was open, so he located two claims right down hill of the Livermore mine. One was Silver Gun, the other was Silver Arrow; standard claims.

##

Kritikos: Now he told me when I met him--let's get back now to 1955, when I met him--he said, "I know you're trying to get a lease from the Livermores. You won't get anyplace, but I think I can help put in a good word for you."

And I said, "What gives with this guy? How could he possibly help me with this?" But I went along, and it so happened Old Man Livermore had died right about then; Norman B. Livermore, Sr., had died. The boys were there; the five brothers. They were ordinary young people; they didn't have a whole lot of money, but their old man had left them a big piece of property up there. They all five of them hated George Anderson because of what he had done to their father, but their father was more easy-going than that as I gather. I think he figured, "Well, hell. A deal's a deal, and I

lost this one," and that's that. So Anderson made a real bad actor of himself. Not only did he locate those two claims, but when he located those claims, he notified Norman Livermore: "Stop your operations here." You had this other company in there that was mining and was furnishing rock down there. He said, "You're dropping calcine on my property; stop it right now. I'll take you to court." [laughter] So here is--

Swent: They were mining the Oat Hill?

Kritikos: The Livermores were.

Swent: Right, and he was mining the extension?

Kritikos: Yes, he was setting up his extension. He got into them, and he went over and jumped two other claims out in the center of the mine. He found two little triangular pieces of land there where the claims missed; a very common thing. Same way, he went to Livermore, and said, "Stop your operations. You're mining my ore." [laughter] So the five brothers hated him; they still hate him to this day. Norman gets mad when he thinks about Old Man Anderson. Bob is a little easier going; he's the youngest of the brothers. Anyhow, I got my lease with the Livermores. I went over to see the Livermores.

Hi Kurt! (Voice in background says, "Hi.") Remember this lady? (Voice replies, "I saw you at the gold mine.")

Swent: Right, right.

Kritikos: Lee [Swent].

Swent: Good to see you again.

Kritikos: She works at Bancroft Library. She does the verbal history and stuff like that. (Voice interrupts, "Will you be here for a while?")

Swent: Yes.

Kritikos: Yes. (Voice says, "Because I'm going to cut a tree down across the road, so--") Right, no, she'll be here for a while.

Swent: Okay. All right. Fine.

Kritikos: That's number three son; he lives here. Anyhow--signed up the Livermores.

Leasing the Waste Dumps from the Livermore Brothers

Swent: Where did you do that?

Kritikos: At their office in San Francisco. N.B. Livermore and Sons.

Swent: What was it that you signed? What sort of arrangement?

Kritikos: Well, it was their headquarters for their holdings, primarily. First of all, the old man had 6000 acres of land up there, right? And they had an ongoing agreement with the mining company--it was mining ore, and I guess had to have some office to handle it.

Swent: And who was leasing the property at that time?

Kritikos: This mining company. I've got to get a hold of it for you.

Swent: Okay.

Kritikos: Got it right here.

Swent: So you wanted to sub-lease it? Is that what--

Kritikos: No, I leased the waste rock dumps; that's what I was after. I didn't have the money to open up the mine. (Let me get my glasses.) So it was obvious to me--what I left out earlier on in this--I looked at what other people had done here at Oat Hill Mine. And when the main mining company had operated here, beginning in 1875--an Eastern mining company--when they finished their mining, the brother of one of the principals stayed behind after they had shut down the mine, and he started working on these waste rock dumps. Boy, it looked like a natural to me. I said to myself, "Monkey see, monkey do. If those guys can do it, I think I can do it too." So that's one of the things I verified very quickly. There were two things I was trying to get an answer to: Are there dumps left? Can they be handled the way the old-timer handled them? And the answer to both was, yes, so I signed the lease on the waste rock dumps.

So I started mining waste rock dumps. Old Man Anderson had said, "I'm going to help you, but after you run the Manzanita dumps for the Livermores, I want you to come down and run the dump on my property."

I said, "Okay, George." [laughter]

Swent: So you weren't doing any original mining at this time?

Kritikos: No, I was working material. Here, here's the company right here. Read that bottom paragraph. I tell you what you can do, you can

borrow that if you wish.

Swent: Oh, I'd love to.

Kritikos: And then be sure to give it back to me, all right?

Swent: Yes, indeed I will. This is October, 1949, U.S. Bureau of Mines investigation of--

Kritikos: Look at that on the main page there in front of you--look at that lower paragraph there.

Swent: [reads] "Present owner, Norman B. Livermore--

Kritikos: Yes, that's it, yes.

Swent: --acquired the Oat Hill Mine in the 1920s and leased it to H.W. Gould, who subleased in 1930 to the Acme Mining and Milling Company--

Kritikos: And then he took it back over.

Swent: --which operated until 1933, at which time the mine was leased to R.A. Hanon and Company.

Kritikos: Right. But you see, Old Man Livermore was in trouble because he was leasing land to this operation--they had their operation going, and they could sue the hell out of him, you know? And that's why George had him by the ying-yang. [laughter]

Swent: George Anderson?

Kritikos: Yes. [laughter]

Swent: Right.

Kritikos: So we started in, and they went on ahead ever since. It turned out to be good. One of the reasons that we avoided a lot of difficulties is that I paid the Livermores 15 percent royalty, which is an unusually high royalty. But I figured I could probably avoid a lot of competition, a lot of horsing around, if I gave them a little. And I did, and they were happy, and I was happy. In fact, Bob Livermore told me at one time--Bob is the youngest of the brothers, and we've always been pretty friendly--he said, "Bill, you know, you saved our ass with your mining operation. We could have never have paid those taxes on that place without your royalty." So that was good to know.

Easy Ore to Beneficiate

Kritikos: We did okay, so what we set about doing--when you see some pictures here, you'll see what the operation was like. It wasn't anything spectacular, wasn't anything brand new. It was an easy ore to beneficiate because of two reasons: the cinnabar occurred in quartz--that's very, very important because--

Swent: I thought it was sandstone.

Kritikos: I made a mistake, I correct it: sandstone. Right, right. There were little quartz veinlets in the sandstone, but essentially, it's sandstone.

Swent: That's kind of special about the Oat Hill.

Kritikos: That's right. So if you go down the road past the Oat Hill, and you go over to this Corona Mine I was telling you about--now that's only two miles away along the contour--but there, the cinnabar occurs in silica carbonate rock.

Swent: Which is a lot harder?

Kritikos: A lot different. And what you can do, you can crush the sandstone and free the cinnabar quickly and at pretty good size--you could crush the sandstone down to about an eighth of an inch. That's pretty coarse, see? And by crushing all your sandstone down to minus one-eighth, you free all the cinnabar. That's fact one: you can free it very easily. That's the way the Good Lord put it in the ground. Second thing is, you can also beneficiate it very easily. The same way that you can pan it, you can concentrate it on a table. Do you know what a concentrating table is?

Swent: Yes.

Kritikos: All right. So, gravity concentration--

Swent: Was any of this equipment there already?

Kritikos: No, we brought everything in. We set up a series of plants. We had a plant, we'd set it up over here, at this particular location when we'd mine that thing out--this big dump--or we'd move it to another one. Because we had a very simple straightforward thing; we had a double-drum hoist that had a Sauerman-type bucket--the same thing that's used in gravel plants if you've seen a lot of gravel plants. You mine the gravel by this bucket and you have these two drums. And one drum pulls the cable up, takes the bucket back, the other drum brings it in.

You know what a slusher in a mine is like?

Swent: Yes.

Kritikos: Very similar to a slusher, except it's much larger. It's a bottomless scraper--much larger--so we just set about using that same set-up. We had a--normally it was a two-table plant: two concentrating tables, a trommel screen, a nozzle that washed the material into a launder over to the screen. Then the screen material would go to the tables, and it would be concentrated. And then we would accumulate the concentrate in 5-gallon buckets. If you had a 5-gallon bucket about full of the concentrate, that would yield a flask of mercury, approximately.

Swent: Did you buy new equipment?

Kritikos: Second-hand. Went over into Nevada and bought a bunch of old tables, and built a lot of stuff ourselves. Trommel screen--I'd buy stuff here and there in the junkyards and all that, and I'd put it together and it would work.

Swent: What were you using for power?

Kritikos: Well, we set in our own generator. Very interesting question. We tried to find out from PG&E [Pacific Gas and Electric] what they wanted to bring power in. Even though they had been feeding power to the mine in the earlier years, when they shut it off, they wanted a hundred thousand dollars to come back in. So we started buying some old surplus generators and converting them over to propane, and that turned out to be a very efficient thing. In fact, we were generating our own power cheaper than we could buy it from PG&E if they had brought their line in. So we continued to do that; we continued to generate our power as time went on. So, a typical installation: you had your generator, the generated power; you had a trommel screen; you had a nozzle there that washed the water; then you had the double-drum hoist.

Swent: Was there plenty of water?

Kritikos: No. You had to save it--you had to accumulate it and save it. I'll tell you an interesting story later on about how we solved the water problem after we got smart.

Swent: Excuse me, I interrupted you; you had your hoist and then--

Kritikos: That's all right. So you had a double-drum hoist, right? So it was an efficient operation. Generally, two men could run the plant. One guy would run the nozzle, and he would wash the material through to the trommel, and to the tables. And the other guy would wash the tables, and he'd run the double-drum hoist. So you wind up with the cinnabar, you dry it out, you add lime to it, then you put it in a retort.

Swent: And was the retort already there?

Kritikos: No, we built our own.

Swent: You had to build that too?

Kritikos: Yes, right. We used the old masonry that was there, because the old mining company there used a retort to clean up their soot. See, they had a rotary furnace so most of their mercury came out when the mercury vapor would join products of combustion, and then they would separate it out in a big condenser system. But they wind up with soot and all that. And they had an auxiliary retort furnace there, so the furnace part was there--most of the brickwork. We built our own new tube, and copied designs, and then built it up because we were poor. [laughter]

Swent: Well, that's what makes it more interesting.

Kritikos: So that's the way it would work; we'd retort.

Swent: Just directly from your concentrate?

Kritikos: Yes, yes. You'd take the cinnabar--have you seen a lot of cinnabar up close? You know what it is, right?

Swent: Well, yes.

Kritikos: I'll show you a little bit.

Swent: I was wondering how coarse it was.

Kritikos: I'll show it to you right here.

Swent: You've got a lot of samples.

Kritikos: Well. Pour some of this in the palm of your hand, and then you can put it back in.

Swent: Okay, right.

Kritikos: Okay? Now that's the cinnabar before you retort it.

Swent: It's a little finer than salt, isn't it?

Kritikos: Well, yes. You ground it down a little in processing it.

Swent: Beautiful reddish purple color.

Kritikos: Years later--that's another part of the story I'm going to tell you about. Now this is--read that box over from the back, and I'll be back.

Swent: This is a Chinese box--well, I'm not going to read that because it's all in Chinese, but the English designation is cinnabar powder prepared by a pharmaceutical company in China; and it's in a beautiful little bottle that looks sort of like--well, they're very Chinese-looking, like perfume bottles, in a very elegant box with gold dragon decorations on it. That's obviously very highly prized in China.

Kritikos: I'm going to tell you a story about that Chinese thing later on.

Swent: Okay.

Kritikos: We were running about ten years, I guess, at this.

Seventh-Day Adventists and Three Sons Good Workers

Swent: You were still just coming up on weekends?

Kritikos: Yes, but I had a crew working here.

Swent: How did you get your crew?

Kritikos: I hired them!

Swent: How did you hire them?

Kritikos: Well, there were always guys hanging around Middletown that had worked in the mines, but the crew I liked best were a bunch of Seventh-Day Adventists. I hired this guy Morrison and he was a Seventh-Day Adventist from St. Helena. And then he brought two of his fellow Seventh-Day Adventists. And they made excellent mining employees for me because they would work on Sunday. And so Mike would show up and have dinner with us on Sunday, and I would go over everything at the mine with him that had occurred during the week. It had another benefit because during the weekends--Saturday and Sunday, with my three sons--I would run the mine--same thing he did with his crew. That gave me a very simple check on what was going on. Turned out to work very, very well. My kids didn't like it, because we took them away from all their weekend activities. That's probably what saved them, that's why they didn't become drug folks.

Swent: It kept them out of a lot of mischief.

Kritikos: Right. They didn't like it very much, [laughter] but they learned a lot of skills and it made better men out of them. They're entitled to their opinions.

Swent: Who was your crew foreman?

Kritikos: Oh, Mike Morrison.

Swent: Did he live up here?

Kritikos: No, he would drive home every night to St. Helena.

Swent: And your sons? Let's get their names.

Kritikos: My sons: Bill, Jr., Gary, and Kurt, whom you saw.

"Drier than Hell in the Summertime and Wetter than Hell in the Winter"

Swent: Right. So you put them all to work.

Kritikos: You bet; worked their butts off. Come over and have a look at this picture here, and you'll get an idea. This is pretty straightforward, and it was pretty successful economically, however, there were problems. One of them you alluded to earlier on: where did you get the water? Well, the problem up here for any kind of a mining operation in this part of California is it's drier than hell in the summertime, and wetter then hell in the winter. It's either feast or famine.

Over the process of about ten years, we learned a few things. One was, we learned it was difficult to operate in the wintertime; you could do that all right, but it was tough. But until you could have a conservation scheme on your water, that's what you were forced to do. So you would run a smaller size operation, 365 days a year, and fight the winter, or do what we did later as we got smarter and as things developed.

One of the things that enabled us to go forward on this new method was we built a new plant at the head of this creek here. This is Cassidy Creek, and if you follow this creek all the way up, you'll see that we built a new plant over there, and there's a big tailing pond over there now. There were two things that enabled us to do this. One of them was that about that time, the Livermores had brought in Newmont Mining Company, because they were interested in this. A couple of years the price of mercury got up to about--they sold some at a thousand dollars a flask. It just went up like a skyrocket for a few years.

Newmont Mining Company Donates Drilling Records

Swent: When was that? Was that during the Korean--

Kritikos: After--midway--five years after the Korean War. I forget why it went that way. There were reasons.

Swent: In the late fifties?

Kritikos: Yes. You could probably find out what--but we used to sell all our mercury in San Francisco. We sold some at about eight hundred, nine hundred dollars a flask, as I remember, which is pretty good.

Anyhow, Newmont Mining Company came in. They were interested in mercury, because so were other companies. When the price of mercury went up, they got interested in it. John Livermore was employed then by Newmont Mining Company. That's before he found the deposit--the new-type gold deposit over in Nevada. I don't know if you know that he is the finder of that; he's the guy that found it all[1]. But anyhow, John was working for them as a mining executive, so he brought in Newmont to look over this thing. Newmont came in and they drilled a bunch of holes--I think they drilled five hundred holes, three hundred feet deep--to see what the ore reserves were in the mine. When that was all done, they decided to come in; they did.

But I decided early on when they came in that there wasn't any sense in not cooperating with them, so I told the guy, the executive that was in charge--I remember he was out here one day, and he was a guy out of New York.

Swent: Do you remember his name?

Kritikos: No, but I'll think about it in a little while; I'll get it in a minute. And he said, "Well, Bill, looks like you got a pretty good efficient operation out here." He came up, saw us running the little two-table plant. He said, "I'm really fascinated by that; that it is a very efficient operation, and I'm sure we can figure out some way that you can hang around," because I was helping him all I could. He'd ask me questions--very smart executive, because that's one of the things that he did. And that's a little different situation than a lot of younger mining executives you see today. The old timers, they were smart enough to find out who to talk to. They'd go down the scale of things and they'd talk to the janitor if they had to, to find out what was going on. So he was that kind of an executive; he'd look for

[1] John S. Livermore oral history in process, 1997.

the information every place he could. I had a pretty good relationship with him, and I said, "Look, all we're looking for--we won't be in your way, we'll cooperate with you every place we can. I just hope you leave us a ham sandwich while you're getting a four-course dinner." And he laughs over that. [laughter].

Anyhow, he came to talk to me one day. He said, "I'm going to run this idea past you, Bill."

I said, "What is it?"

He said, "If we open up this mine, we've got to have a place for a tailings pond, and we're thinking right now, our people are thinking are thinking of putting a big tailings dam down there in James Creek--almost Pope Valley. What do you think of that idea?"

I said, "I think it's a lousy idea. I don't think you can do it. I don't think the State of California will allow it." At that time, I was working for the State of California as a field division chief on the state water projects, so I knew some of these things. I knew, for example, that part of the state water project is they had plans for building a dam down there where Pope Valley is, and it was going to flood this whole canyon coming back up; that's going to be part of the project. I also knew what I had observed in the wintertimes. In the wintertimes you'd have huge run-offs down there, and you'd see basalt boulders as big as small cars rolling down the canyon.

Swent: That's a little hard on the dam.

Kritikos: You bet. Not only that, it's pretty hard to design a facility where you'd have to let all that water through it, see? Now, for example, you're familiar with what you have at Homestake, right?

Swent: Yes.

Kritikos: Now suppose at Homestake you build a tailings pond right on top of a big stream--drainage area--where huge torrential rains went through there every winter! That would be a difficult problem for Homestake, wouldn't it?

Swent: Certainly.

Kritikos: Well, that's what you had out here. So I said, "I wouldn't build a dam there if I could do it for free, because you've got to handle these huge flows. Besides, I don't think the state will let you do it, and the one way for you to find out is to go to the Division of Dam Safety in Sacramento and talk to them, and go to the Water Resources Control Board people and ask them what they think about it."

He did, and he told me later on, "By God, Bill, you were right. You saved me a lot of trouble." So when they left--when they decided not to go on it--they turned over all the drill records, so I've got the profiles in there, and the drill logs, and everything. So I knew then what they had found out after drilling all these holes. I was sure after looking over them when they left that we had a pretty good ore body there for a long, long time. That was fact number one.

Dow Chemical's Flocculant Enables Water Recirculation

Kritikos: And fact number two was: another development occurred, and it was in the uranium industry. I found out about it by just reading the [Engineering and] Mining Journal, and also reading Transactions of mining and metallurgical engineers; I would go to the libraries and read those as it came out. One of the developments that was going on in the uranium industry at the time--

Swent: That was the Transactions of the AIME, right?

Kritikos: Transactions of the American Mining & Metallurgical Engineers.

One of the things that was going on at that time was if you went out there to see all the uranium mills that we had out in the Four Corners area, they were all mining the sandstone, and they were all crushing it, and they were winding up with the end product--uranium pentoxide, I think, was their end product. In a way, it was kind of like the cinnabar up here at Oat Hill; you dug up this yellow sandstone, and you crushed it, and you put it in thickener tanks, and you took the uranium out using acid circulated through. And you use a series of these big thickeners --counter-current. Very simple system, but it requires huge investments in tanks, and huge investments in water-handling.

So about that time, American Cyanamid--no, Dow Chemicals, excuse me, Dow Chemicals--developed a synthetic flocculent. American Cyanamid was working on it, and it had some results that were truly outstanding because you could apply this synthetic flocculent to a slime--a muddy column water of slime--and the slime in there would coalesce and drop like a rock. When I read about that, I could hardly believe my eyes! So, I sent off and got some samples from Dow Chemical. And they sent me some of their data, too. I did some work on it in the lab, and it just worked like a charm from then on in, because Oat Hill slime would drop like a rock.

What that led to was a realization if we could build a new plant, set it up right, we could recover water and recirculate

water. After your water comes off the tables, it's muddy and all that, and it goes down into your tailings pond, right? But if you had mixed it with flocculent as it heads for the tailings pond, by the time it settles out of the tailings pond, you had clear water, and remaining sludge. So that led to building up this system: building a dam down here to trap the winter flows and then pumping it back up as make-up water. That enabled us to double the capacity of the plant and only run about six months out of the year; avoid the wintertime.

We built this plant up here at the head of Cassidy Creek based on those two things: the knowledge that Newmont developed, that you have plenty of ore there and--

Swent: You were now working both the extension and the--

Kritikos: Both, yes. Then we were working in the open pit. We were off the dumps then. We were digging in the open pit.

Swent: And you were able to build your tailings dam without any problems?

Kritikos: Yes, well, this is not the tailings dam, this is a water dam. The tailings dam is up the head of the canyon. In those days, you did everything a whole lot easier; all mining companies did. You didn't have to go through all this crapola that you go through now. You could not do any of these things today; particularly as a small entrepreneur.

In fact, I remember one time when Bob Livermore said to me, "You'd better come up this Saturday morning, we're going to have this chief engineer from AMAX." You know who AMAX is?

AMAX Tries to Drill for Steam

Swent: Yes.

Kritikos: Big outfit--very environmentally sensitive, very environmentally conscious. I said, "What's cooking, Bob?"

He said, "Well, they want to discuss up there what we're going to do with the mercury mine here." At that time, the Livermores had leased out their land to AMAX to drill for steam. I don't know if you've been on the back road here, but if you take out of where you stayed, come out this way, you'll see this place where they drilled the steam-well there. Have you been there?

Swent: I drove up on most of that drive this morning.

Kritikos: So anyway, AMAX drilled a steam-well there to see what the potential was for developing steam. The potential looked good, because when you go back down to the valley--down on the Napa Valley floor--you have all these steam baths there, that the Middle Europeans had been utilizing. By the way, do you know why they call it--

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Kritikos: Old Man Brannan was a native of New York, and he was familiar with Saratoga Springs, New York. Do you remember the story, "Saratoga Trunk", which is about Saratoga Springs?

Swent: Right.

Kritikos: He came here, and he found all these steam baths and everything. He named it Calistoga, which is--

Swent: California Saratoga?

Kritikos: That's right. [laughter]

Anyhow, the future looked good for steam being on that side of the mountain because here you had all these appearances of steam. So AMAX had carried on a very impressive public relations campaign with Napa County--trying to get these boys in the Planning Department to let them come in. And they had a tremendous record; they're some of the best in the business on environmental problems. They got their lessons up at Crested Butte up there on a project in Colorado. They knew what they were doing.

So we were up there this particular day: the chief geologist, whose name I can't recall, of AMAX; Bob Livermore; myself; and a young pipsqueak from the Planning Department of Napa County. This kid was about twenty-eight years old, and I don't think he'd ever got a particle of dirt under his fingernails.

Swent: That's the age when you know everything. [laughter]

Kritikos: That's right. A pretty smart fellow, you know. [laughter] So, he looks over to me and says, "I guess you're Bill Kritikos."

I said, "That's right."

He said, "Do you still operate this mine?"

I said, "Sure."

Then he said, "Well, why aren't you running it now?"

I said, "Well, because the price is not right. I don't owe

the bank any money; I could sit here, and when the price comes into range again, we'll fire up again."

I'll bet you can't guess at his response. He said, "Well, that's a pretty good thing, because if you ever shut this down, we'd never let you operate again." This is some twenty-nine-year-old jerk from the County Planning Department.

Shortly thereafter, they turned AMAX down, so AMAX left the state; they went elsewhere to go for steam.

Swent: You're in Napa County here?

Kritikos: Yes. The mine itself is in Napa County. Now, I'll tell you where--if you had not turned off down here, to come down here at the garbage cans--if you had continued--

Swent: I did continue for a bit.

Kritikos: A little higher?

Swent: Yes.

Kritikos: You remember there's a sharp bend in the road, and there was a little tunnel going into the side there? I don't know if you saw that or not.

Swent: I didn't see the--

Kritikos: The county line runs through there, okay? And it also runs through the center of this dam out here, approximately, okay?

Swent: Maybe that's where the paving ends.

Kritikos: No, no. That's higher. Well, let's see now. Yes, you're about right, okay. Not too far off. Anyhow, the mine is in Napa County; we are in Lake County, I think, because if you look at our maps--nobody has spent the money to find out for sure where the county line is because that costs a lot of money. You go up on Mt. St. Helena where the Livermores have land up there, and they rent out to the communications outfit. The corner--the brass monument is up there the same way as the Mt. Diablo base and meridian is down in the Bay Area--that monument runs right through here, and goes over--if you're on Butts Canyon Road and you're headed for Pope Valley--you know where the county line is here? Well, you go to the county line there to check it; there's a quonset that's in a state of disrepair right on the hill. The county line goes through there. But nobody knows for sure where it is, and it costs too much money to find out.

Anyhow, we had a couple of problems perking up. One was that

the EPA had come in with a lot of new requirements about mercury mining and all that--actually we were in the clear on that because we were not a conventional mercury mining operation. Very, very simple reason: we gravity-concentrated cinnabar, dried the cinnabar, and put it in a retort. Now, the only air that is caught in this system is what is there in the retort before you seal it off. And if your retort is operating properly--and you know right away if it isn't because you'll see funny-looking stuff coming out in the front-end, and you won't be getting any mercury in a bucket. So it's not the same thing at all as a conventional rotary furnace, like a cement-kiln mercury plant.

Swent: So your plant was quite different from those.

Kritikos: Right, but trying to explain all this--I tell you, I don't have any real hard biases against people, but I have learned one thing in my life: I don't want to spend much time arguing with Hindu engineers. Hindus, and Pakistanis, forgive me, I'm going to stay away from them, because that's a different world you're playing with. [laughter] Just like the guy said, "East is East and West is West." It doesn't mean they're not good engineers, but they're on a different wavelength than we are. So, I went to see this guy; he was a Hindu engineer, and he was in charge of the EPA office in San Francisco. God, I spent two hours in his office trying to convince him that this was not a typical mercury plant, that we were concentrating cinnabar, and retorting it. Couldn't buy that, so finally out of desperation, I said, "Look, why don't I drive you up to Oat Hill Mine. I'll buy you lunch along the way, and I'll bring you back. I just want you to spend two hours looking at the place up there; then I won't have to talk to you anymore." Didn't want to do that either. So I was feeling pretty blue about that time.

Discovering the Asian Market for Cinnabar

Swent: When was this? This must have been 1970 by now?

Kritikos: Yes, early seventies when EPA came in with all their crap. So, about that time--shows you what luck plays in these things--about that time, I got a call one day from a guy named Anthony Camaratta from the U.S. Bureau of Mines; he was a commodity specialist in Washington, D.C. Anyway, I had met him one time at one of the mining conventions in Vegas, I think. He was on the phone this particular day, he says, "Hey Bill, I've got a couple of Korean engineers here. They want to come look at your operation."

And I said, "What do they want?"

He said, "They want cinnabar. They want to find a steady supply of cinnabar, and they want to ship it to South Korea. I told them that your operation is the only operation I know of in North America that concentrates cinnabar the way you do, and you have a steady supply before you retort it."

I said, "Okay, send them out." So they came out. They were both geology graduates from--they were Seventh-Day Adventists--they were geology graduates from this Seventh-Day-Adventist College down there in the Southland--the medical school. I forget what the name is. That's where they got their degrees.

Swent: Loma Linda?

Kritikos: Yes, Loma Linda. Right. Had a very pleasant time with them, and they said, "Well, Bill, this cinnabar is great. It has the right purity, meets all the specifications, but could you just make it a little bigger in grain size?"

I said, "Well, boys, you got me there. The Good Lord put it in the ground at that size. The only way you could improve on his handiwork is to crush the rock around it, and whatever that particle size is, that's what you get. Now, if you're talking can you go into the laboratory and figure out a binder that might put it in bigger particles, I guess you probably could. If that's what you're asking me to do, I'll try it, but I don't think it will work for a simple reason: those folks that buy the cinnabar in the marketplace of all the Chinese communities all over the world--the people that buy that cinnabar buy it in a special size, and the larger the grain size, the more they pay for it. The reason they do that is they know if they take that--if they bought a grain of corn-size cinnabar and paid more for it, and took it home, and put it in their own mortar and pestle and ground it up, they know what they've got. They know they're not being screwed by a guy that's sold them some cinnabar powder with a lot of other stuff mixed in, so I don't think you're going to fool the natives. Those are the final guys. Besides, I know for a fact that that's a custom worldwide. A friend of mine, John Livermore, told me that that's what the Arab women do in Northern Africa. When they buy galena for their eye shadow, they buy it in a certain size in the marketplace and then take it home and grind it, so I don't think it will work, but I'll try it." So I played around.

"Yes, you do that, and we'll work at the lab down at Loma Linda."

I said, "Fine, but I don't think it's going to work."

We tried it, we got some samples. I'll show you some artificial nuggets that I made. But they won't work. They won't work. [laughter] I must have that. [Goes to find sample.]

Open up your hand.

Swent: Okay. Oh! That's a big one. That is more like a kernel of corn.

Kritikos: Right. Now, the problem is that the consumer knows what he's getting because it doesn't heft right, either. When you heft it, and you compare it with a real nugget, you can tell right away that the real nugget is denser.

Swent: Oh, really?

Kritikos: Yes. So, anyhow, they said, "Well, we'll try some of the stuff you got."

So I finally got a guy--I knew a mining engineer in San Francisco, a consultant that worked on furnace plants and everything all over the Orient. I said, "What do you know about this? Do you think you can peddle some of this cinnabar? I understand that there's a market for it." The reason I was interested in this--if we can convert all of our production over to the cinnabar before we add the furnace, we could get rid of the Hindu in San Francisco. [laughter]

Swent: You didn't need to go to mercury at all. Just peddle your cinnabar.

Kritikos: Right. "Yes," he said, "they use it all over the Orient, Bill."

Swent: They use it for--

Kritikos: Well, they consider that it's an aphrodisiac, so they ingest it in various ways. They have a little nugget--they'll mix it in pork and eat it. They'll make tea out of it.

Swent: Of course, they use it for all those beautiful lacquer boxes.

Kritikos: Oh yes, they have all the artistic stuff. If you go to Gump's and you look at all the lacquerware, that's cinnabar.

Swent: But it's also a medicine?

Kritikos: Now, you can argue about it and say that's silly. In fact, our government forbids its use medicinally; the Uncle Sam. So anyhow, despite all that crap, this guy Mike told me, "Yes, there's a market, but what you'd better do, you'd better get an exporter." So I did. I got a guy down in San Francisco that exported cinnabar, and he played in all the other pharmaceuticals: ground up elk-horns and all that, he would buy--elk-horns from the Boy Scouts in Montana--and he would export them. The main thing we dealt with, and he had a huge volume of business in it was--they're using it now in chewing gum and everything else. What the

hell is it? I'll think of it in a minute.

Swent: From a plant?

Kritikos: They grow it up in Wisconsin; I'll think about it--

Swent: Oh, ginseng.

Kritikos: Ginseng, that's it, yes. I did quite a bit of research about that and found out that the Russians were using it--were using ginseng on their Olympic teams. I got interested in all that because this exporter bought and sold ginseng and all the other products that go with it; and ground up elk-horn, and cinnabar.

So I started shipping cinnabar through this guy, and it looked great! He wanted it in 5-gallon GI cans--brand new 5-gallon GI cans. So you would fill a GI can up with 50 kilos. And that would produce about a flask of mercury, but we would sell it to him for fifteen dollars a kilo, where fifty kilos meant 750 bucks a can instead of $200 for a flask of mercury about that time.

Swent: And you didn't have the bother of--

Kritikos: Right. Everything's great. The environment's all set up. So we had visions here of great riches at Oat Hill. And we had all the maps from Newmont; we knew where the ore was and we knew how to mine it and all that. And there was a huge supply left; there was at least a hundred years of ore there at the rate we were producing. So we sold a lot of cinnabar to the Orient through this guy.

Swent: Not just Korea?

Kritikos: Right. What happens is this: at that time, the sales channel was through Taiwan; this guy would ship to Taiwan, and this guy in Taiwan, a Chinese guy in Taiwan, would ship to Hong Kong, Singapore, all the overseas Chinese colonies. So anyplace in the Orient that you go, you can walk into a drugstore--just like a Chinese drugstore in Chinatown; have you ever been in there?

Swent: Occasionally.

Kritikos: Okay, so you know what happens there. The Chinaman shuffles in with a little piece of paper, he had been to see the guy that sticks pins in you and stuff like that, and he's given him these four little things. So, this Chinaman shuffles up there to the counter, and this guy at the counter takes this piece of paper, turns around on the wall there where there's all these little three-by-five card-index-type files. So he gets a pinch of this, a pinch of that, a pinch of that--ten bucks. Okay? This goes on all over the world. Everyplace you have a Chinese colony--an

expatriate colony--you have Chinese buying it. And the going price for it is $500 a kilo, so, I thought I was making a whole lot of money shipping it out here at fifteen.

So on our first trip to China--to the Orient--I decided I'd go do my own research in Hong Kong. So I checked about ten different Chinese drugstores in Hong Kong. Same story: when you got through the language barrier and came back and weighed the cinnabar up, and accounted for the difference in the dollar and the Hong Kong pound, that's what it amounted to, $500 a kilo! Same thing in Bangkok, same thing in Singapore. When my wife and I went to South Africa in '83, same thing there! You go out there--outside of Johannesburg, there's a little Chinese community out there in one of these little towns. In fact, I bought some cinnabar over there, and brought it home here. And I weighed it: magic! $500 a kilo.

So anyhow, I came back and told this Chinese fellow in San Francisco. I said, "Hey, we have a problem here. Either you're dumber than I think you are, or I'm smarter than you think I am. Here is the problem: the going rate for cinnabar in Hong Kong and all over the Orient is 500 bucks a kilo. That's a great big gap between $15 and $500. I'm not saying you're the fault." He got very huffy right away, you know, because the Chinese are very sensitive about stuff like this. I said, "I'm not saying that at all. I'm saying maybe there's something for both of us to learn."

He got sniffy then--got a little pushy. "Well," he says, "you have to deal through me."

"Well, that's where you're wrong, pal." I said, "I don't owe anybody a goddamn dime. I could put the padlock on that mining operation, and I've got thirty-four other things I've been postponing that I could get to. No problem at all; don't need it for the money, don't owe anybody. So you made a mistake on that one. However, you think it over, maybe we could do business later on."

Well, it didn't make much difference because at that point, the U.S. decided to change its policy toward mainland China and towards Formosa. And as you recall, it downgraded the status of Formosa, and elevated the diplomatic status of mainland China. So the guys on Taiwan got mad; that was right about the time of Reagan's entrance. I think Jimmy [Carter] started it, and then Reagan finished it off. That was part of the emerging policy. It was after Nixon's visit and all that. But it was part of the steady American policy to lower, diplomatically, our contacts with Formosa, and raise them with mainland China. Soon as that happened, Formosa shut off all exports from California, and that was that. School was out.

One of the reasons that you had that little package there with all the Chinese writing; years after that--remember when they opened mainland China for American tourists?

Swent: 1978--around there, 1979.

Kritikos: So Jacqueline and I went there. We took our number two son, Gary, with us. He was an avowed communist at that time after graduating from San Jose, and I wanted him to see the focal point of communism. [laughter]

Swent: The "beauties" of life in a communist country. Yes.

Kritikos: So I went to the fair there. They have international trade fairs there.

Swent: Canton?

Kritikos: Yes. So, I told the little girl there that was our tour guide, I said, "Look, I want you to leave me alone for a couple of days. I want to sit out there at the trade fair, and I want to talk to the people in your pharmaceutical industry."

"Why is that?"

"I'm thinking about buying cinnabar from mainland China." I lied, you know. What I was trying to find out was if they were producing it. So, to short-cut a long story, I went out there. She had lined it up. I spent two days with a room full of Chinese, drinking endless cups of tea and going through the translators. This guy that was head of the enterprise--he was a big, burly guy, he must have been from Northern China or something, he was about 6'1"--all of a sudden he jumped up the second afternoon, he jumped up, and I thought he was going to beat me up or something, got mad at me. He runs into his office, then he comes back with this little card. This thing right here. Now, if you take the cinnabar out of these bottles, and weigh it up: $500 a kilo. But the problem is the pharmaceutical industry in mainland China prepares this specifically for the overseas Chinese market. They are trying to change the new generation in mainland China from relying on the old folk remedies, so you can't buy cinnabar in mainland China, even though a pharmaceutical outfit produces it--that's a government pharmaceutical outfit. Everything else is all the same, except now, in the overseas market, you're dealing with Big Brother. And that shot the market.

When Uncle Sam changed his diplomatic set-up and let mainland China join the club on trade, one of the results in the cinnabar market was any overseas Chinese that was purchasing cinnabar from any source other than mainland China promptly changed his gears

and began buying from mainland China because he had relatives over there, and that's the wave of the future, right? So today, don't even worry about selling cinnabar to the overseas Chinese. So there went our great and glorious design there. Easy come, easy go. [laughter]

But we did use this new--and that's what changed things in our operation; we changed the plant over to here, head of Cassidy Creek, built a new plant, doubled its capacity to 200 tons a day, and ran it six months a year. By using the synthetic flocculent, we were able to get by. We would save all the water from the springs, and everything, and put it in a tailings pond. And then we would pump out of here, for make-up water, beginning about this time of the year. When we set this thing up--built a reservoir and everything--we had a pump down here, a triplex pump, and it would pump water all the way up the canyon, and drop it into the tails pond. So that was our system. You mined your ore, hauled it over in dump trucks, ran it at the plant, added a synthetic flocculent to the water by the time it left the tables so by the time the muddy water got out to the pond, it was already settling out so you could recirculate.

So we ran there quite awhile and, about 1975, we got pretty much involved over here--this thing on the geo-thermal project there on the disposal site for drilling muds. It started doing so well that I had to have the machinery, all the equipment stuff that I was using at Oat Hill Mine, tractors and all that, to build the ponds over there.

The Geo-Thermal, Inc., Disposal Ponds; Competing with I-T

Swent: The geo-thermal?

Kritikos: Yes. So Oat Hill Mining Company built all the ponds for Geo-Thermal, Inc.

Swent: And that's what you went into with Bob Livermore?

Kritikos: Yes.

Swent: And was that contingent on the AMAX deal?

Kritikos: No, it had nothing to do with AMAX.

Swent: No? Okay.

Kritikos: What we did then, we contracted with PG&E for a lot of things. One of the things that helped there was that Norman Livermore--

Swent: Ike?

Kritikos: No, his father. His father was on the board of directors. Didn't they ever tell you the story? He was on the board of directors at PG&E for thirty years. If you go down to the lobby at the PG&E building, you could see an alcove over there that's devoted to the Livermore family. Have you ever seen that?

Swent: No.

Kritikos: Well, here's the story on that: the forebears of the Livermores came out from New England, and they were very enterprising people. They got into mining and they generated power on the rivers above Sacramento. In fact, they brought in power to Sacramento for the first time.

Swent: I had heard that.

Kritikos: The Livermore forebears sold their ownership of that to an intermediate company which later went to PG&E, so the Livermores wind up with a whole bunch of PG&E stock, so Old Man Livermore, Norman, Sr., is on the board of directors for thirty years. That doesn't hurt when Bob Livermore goes out and starts to deal with PG&E to fight our competitors. When we opened up a disposal site here, we were fighting this multi-million-dollar outfit down in the Bay Area. They were madder than hell, and we got into litigation with them, spent--

Swent: Who was that?

Kritikos: I-T. Have you ever heard of I-T?

Swent: No.

Kritikos: Well, I-T built a disposal site out there in Kelseyville. They had shut it down; they handled the same thing. But one of their big customers was PG&E. I remember dealing with one of the principals in I-T; owner of the outfit. He said, "Well, Bill, you won't have a chance over there, you and Bob, because we've got a member on the board who is the wife of one of our executives."

I said, "Well, okay. I give you that. You've got a head nigger that's doing some pushing for you over there. We've got our own head nigger on the board too. I guess we're going to have to see who's got the biggest head nigger before it's all over with." He got mad as hell at me. [laughter] So we spent about $100,000 on litigation with him. We ended it up one day.

Here's how it ended: Bob and I had gone down to have breakfast with this guy; this guy is David Murray Hutchinson. And he's an out-and-out bully. He's a USC grad; fraternity boy, but he's a

thug. His daddy gave him everything he's got. His daddy had a real nice business down at San Diego Naval Base. He had enough navy officers bought off to where he did all the cleaning of all the ships that came in. That's a lot of money. That's where I-T came from, all right? So we were sitting there waiting for Murray to show up.

Bob said, "God, I hope you don't rough this guy up, Bill."

And I said, "Well, look, we're not going to change a thing. You carry on your Gary Cooper routine. You're the good guy, and I'm the bad guy. I will be the asshole continuously, but don't worry, we'll make out all right."

While we were waiting for him to show up, Bob had ordered hotcakes, and I had, too. And he handed me the Chronicle business section, and I was reading that. I said, "Well, well, well, here's a puff piece in the business section of the Chronicle. It's all about this tremendous masterpiece of environmental excellence that Murray Hutchinson had out there near Port Chicago."

It was a lousy thing. The puff piece was all a bunch of lies because that is ecological disaster waiting to happen. If we get the big earthquake here in California, on the Calaveras fault, that crap that they've got stored there at I-T's facility, a lot of it is real mean stuff like tailings from ethyl--stuff from refineries. That stuff is too loose to plow and too thick to pick up. It's bad, bad stuff. And they don't know what the hell to do with it; it doesn't evaporate; it's just sitting there. It's deadly crap, and if you have a big earthquake, it's going to drop right into San Francisco Bay, no question about it. That is a fact of existence. Anyhow, here this guy has a puff piece about this tremendous facility they have out there at Martinez--that's where it is. I said, "Look at this, Bob."

"Well," he said, "I guess old Murray knows somebody on the Chronicle."

"Yes," I said, "but why do you think we're looking at a puff piece in the business section of the San Francisco Chronicle this fine morning while we're sitting here waiting for Murray to show up? Why do you think this is happening?"

"I don't know, Bill. What do you think?"

"Well," I said, "I think this jerk is getting ready to go public with his corporation. He's putting it on the market, and this is a puff piece, preliminary to that."

"Oh, that's a pretty good jump there, Bill," he said. "I

don't know; you're right in most of these things. I don't follow the logic."

I said, "Well, we'll try it on Murray when he comes in." Murray came in a little while later. Of course he and I never did like each other, so we don't go through the pleasantries. He got along fine with Bob. So we were chomping away at our breakfast and I said to Murray, "Well, Murray, I'm going to surprise you; I'm going to commend you today. I'm not going to get into a fight with you. I want to commend you--"

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Swent: So you congratulated him on his puff piece in the Chronicle.

Kritikos: So I said, "Well, you know what? I think we ought to finish our litigation, Murray. Bob and I have spent a $100,000 on this; I don't know what you have spent in-house. We should just stop. We should back off and agree to compete up in Lake County. We're going to eat your lunch anyway, because we have a small mom-and-pop operation, and it could run rings around you. You got a bunch of bureaucratic lead-asses up there, and they can't operate as cheaply as we can, so we're going to eat your lunch anyway."

"Well, is that all you've got to say?"

"No, I think it's the time to do this because I think you're getting ready to go public; and if my surmisal is correct, you certainly don't want anything to show up in the files of the Securities Exchange Commission that you're involved in litigation with a mom-and-pop outfit up here in Lake County with Bob and Bill. That will kill you. In fact, they'll pull it. You'll never get out with a public offering."

He got pretty mad. I knew I had hit the vagus nerve with him on that. He said, "Well, you're just a smart-ass son of a bitch, you know that, Bill?"

I said, "You're entitled to your opinion. However, that doesn't change the facts. You're getting ready for a public offering. You go back and you check with your lawyers. Tell them that you talked to me, and tell them exactly what I told you. You don't want any information about this lawsuit you're in with Bob and me to show up before the SEC; if it does, you are dead meat. We're not talking about some maybe thing; this is a fact of life on Wall Street."

So he threw his napkin down and walked off, and he said, "That's enough of this crap. I'm not going to take any more of it."

Before he left, I said, "Look, if you want to win this battle that you have with Bob and me, we'll write you out a check for a dollar. But that's all the hell you're ever going to get. So you better pull your stinger back out; stop the litigation. I'll send you a check for a dollar, and let's call it good and we'll compete up there. You go ahead with your public offering, and I hope you get rich."

He left; threw his napkin down and left. Bob said, "Well, at least you've done it now, partner. I think you have really fixed it up."

I said, "No, I don't think so. You just sit tight and don't say a goddamn word."

About five days later, our lawyer calls up from San Francisco, this guy I'm dealing with in San Francisco that has spent most of that hundred thousand. "Bill," he says, "I've got something here that I don't know what to make of."

I said, "Why don't you just start by describing it to me."

"Well," he said, "I just can't believe it. That's all."

I said, "Just read the first three paragraphs to me so I'll know what you're talking about." What it is is a law firm from Murray Hutchinson down at I-T has agreed to cease all litigations, stand off for one dollar, and compete with us up in Lake County. [laughter] So the lawyer says, "This is some kind of an April Fool's joke?"

I said, "Let me tell you, pal, listen to me carefully; here's what I want you to do: you just put Xs where you want Bob and me to sign, you Federal-Express this up to us; that's all you've got to do. Don't get fancy; don't try to outsmart it."

He said, "You mean this is for real?"

I said, "Absolutely, it's for real."

"How did that come about?"

I said, "Well, let's say that not long ago, Mr. Hutchinson and Bob Livermore and I had a very friendly breakfast, and that's what happened." [laughter]

And then we competed with him up there. But, in 1976, the EPA [Environmental Protection Agency] sent us identical letters. They told them to, "Shut it down right now; you're in violation with federal law." They told us the same thing. And they were wrong, but I will spare you all the intermediary details. They were

wrong because the federal government--when Congress passed the law--passed the RCRA [Resource Conservation and Recovery Act] legislation--do you know what RCRA stands for?

Swent: Remind me.

Kritikos: Resource conservation and that sort of thing. Okay, the oil industry specifically got exemptions for the provisions of that act for all oil-drill drilling wastes, any drilling wastes like that; or power industry waste--specifically exempted. But the in-house lawyers in EPA had concluded with their interpretation with the law that that did not exempt PG&E from the secondary products they were producing. When they put their pollution control equipment up at PG&E at the different power plants up there at the Geysers, they were producing waste products that they claimed were not under the purview of the law. And we were telling them, yes, it is. What happened after all this thing shuffled around, the EPA realized they had made a mistake. And the lady from the regional office down there called up one day--we had shut down now--one day it was a business worth six million bucks, and the next day it was worth zero because you lose all your customers once you have that happening.

"Well, Bill," she said, "you were right. We've been instructed that we have to come back to Congress with our proposals on the exclusions that are in the law right now." So, she said, "I'm going to do everything I can to get you and Bob back in operation up there." She's a friend of the Livermore family, anyway.

I said, "That's fine." And by God, they did. That surprised the hell out of me, because they busted their butts. She put three of their executives up there to work with me, and work with the county, and work with other people to see if we could get back in business quickly. But it's too late, because once your customers that you've been receiving the waste from know that the EPA is going to shut you down, has already shut you down, you're all through. I just mentioned that to you aside as one of the exciting adventures that Bob Livermore and I have been in. [laughter]

Some Ridiculous Policies of the EPA

Swent: So that is still shut down?

Kritikos: It's shut down. We're getting ready to clean it up now. The PG&E and five oil companies are going to spend about $20,000,000 to clean it up. It is ridiculous; it's the most--I could go spend a

lot of your time telling you the ridiculous part of it. But one of the things that is happening right now--you watch it, it'll develop--the country is finally coming to understand that the present policies of the EPA--they have spent, I don't know how many billions of dollars, but nearly all the money has gone to lawyers and professional environmentalists. That's point number one. Point number two: they're deciding that it doesn't make any difference; doesn't do much environmentally to pick up waste from place A here, and haul it two hundred miles to place B, and dig another hole in the ground at place B, and put it in there. You better take care of it at place A.

Swent: What exactly were you treating here?

Kritikos: Well, we would receive the waste. We starting out receiving drilling mud.

Swent: Drilling mud?

Kritikos: Now when you drill a hole, a well, exploratory well for steam or oil, you come up with the by-product coming up through the hole: that's muddy water. To give you an example, one February, Shell Oil Company was drilling on the west side of the Geysers up there, and they were down about a thousand feet, and they had hit a pressurized water zone. Well, they had to haul all of that water off. The water that was coming out of the hole was clear; no muddiness, no nothing, good enough to drink. However, legally, it was waste. They brought it to our site. They commandeered every tanker truck in three counties. For about five days there, we had a steady line of trucks coming down the disposal site, all day long and all night. So when we billed them out at the end of the month for that water, it was--I think it was about $170,000. I want to show you that check, because we kept it as a souvenir. [laughter] And the water was gone by next October because it evaporated. You know, some of these things are really hard to believe. I tell them to people, and they just stand back and wonder whether that guy is on the weed or something. Here's the check right here from Shell Oil.

Swent: Here it is: $162,648.

Kritikos: That's right. And there's the first check we received from AMAX.

Swent: $261.

Kritikos: And all that water we're talking about here evaporated! That's what's behind those ponds over there; you bring the liquids in--liquids and solids in--you store them, then the evaporation cycle comes in, and you're much reduced, and you take your solids out and bury them. That's what the system is all about. What else do you need to know now about Oat Hill?

Visiting the Almaden Mine in Spain: Hazards of Mercury Mining Over-Rated

Swent: Well, I had one big question, and that was about health and safety: the hazards of working with the mercury.

Kritikos: No. Here's why that's a very, very interesting thing: if you research this--there was an article in National Geographic about the mines in Spain. Now, Jacqueline and I had visited the Almaden Mine in Spain; it's been going since the time of Christ. The reason it controls the world market--its ores, I guess up to just recently, had been running about 30 percent. That's 600 pounds of mercury to the ton. Nearly all the ores in California run about ten pounds to the ton. 600 versus ten, so when we went to visit--this will answer your question very quickly about the hazard--when we went out there to Almaden in Spain, I had talked to this young lady who was a tour guide. We had gone over to North Africa on a tour, and when we came back I said, "Look, I want to go and visit this mine at Almaden. I'm in the mercury mining business myself."

She said, "I'll arrange that. I'm sure our mine manager there will be glad to see you." She went to the Ministry of Mines in Madrid, and I guess she told them I was a real hot-shot from California or something, and so we wind up over here at the little town of Almaden.

As we were approaching it, Jacqueline says, "I think you lost your way, Bill. We're in the wrong place."

I said, "That's a bunch of crap!" I was driving and she was navigating, you know. "That's a bunch of crap, babe. There's only one goddamn road coming out this way, and that's the one we're on. Why do you think we're lost?"

And she said--she had been very observant--"There's no waste rock dumps out here."

I said, "That is correct; and there's a reason for it. I'm not certain, but I think the reason is that they put most of their waste back in the mine, and there's been very little waste. These are very rich ores out here. That's what I think is the reason, and we're going to find out."

Then we came over to the mine. They took us in to the guy that ran the mine. He was a Belgian mining engineer, and he was tickled pink to see me, because the guy is going stir crazy, sitting there talking to the Spaniards and all that.

One of the things I noticed driving in, in this little town

here you have old guys ninety years old, you have little babies toddling along, right in this town, and this town has been sitting on a mercury mine for two thousand years, and that's what these people all get their living from! So the question that flashed through my mind is how can we have this demographic profile here? Why isn't everybody dead? Why don't we have ugly-looking people running around with three horns or something?

Swent: They all had teeth?

Kritikos: I mentioned that to my wife. So the Belgian mine manager took us in, rolled out the red carpet, took us around the plant and the mine. Now, he had just built a brand new plant; American design. Even though it was brand new, he had leaking pipes and everything. Here was mercury dripping out of these pipes down to pans on the floor. So the Belgian said, "Well, what do you think, Bill?"

I said, "Well, it's a good design. It's American design. But if you ran this thing up in California, you'd have your ass shut down at six in the morning. You couldn't get away with this."

"Oh," he says, "You Americans worry a lot about that stuff. Why do you think we've been able to operate this mine for two thousand years?"

I said, "Well, I grant you that question occurred to me as we drove through town coming to your office."

He said, "By the way, I won't try to answer that, but I want you to meet two countrymen of yours."

So he took me to his office, and he called these guys in. Here come these two fat guys in here, with white smocks on. And they're from some Eastern university, Rensselaer Polytechnic or something or other; and they've been sitting on their butts over there doing this environmental work. We got acquainted. And they were working on a contract from the EPA to find out how all these people were surviving at the little town of Almaden with this mercury mine running 2000 years solid. I knew the answer to the question, but I wasn't going to tell them. These jerks had not done their research work.

In fact, in National Geographic, there was an article about the Almaden mine in Spain and it showed what they did. The guys that worked in the mine, they worked a total of twenty-three days a month, but if they worked up against a face in the mine--the ore is so rich there that you have mercury coming out of the ore. If they got squiffed--by that I mean, if they inhaled mercury vapors --see, if you were in the mine heading, and you had some mercury coming out, unless you take special precautions, you're going to ingest some mercury vapor. So, when those guys did get squiffed,

what they did is, they took the miners topside, right away, put them under heat lamps. They stayed on top for about three days of heat lamp treatment, then they'd give them jobs on the surface there, and then next month they go back down the mines.

These two guys from Rensselaer Polytechnic Institute didn't know that; they hadn't done their homework. So I said, "Say, what are you guys doing here?"

"Well," they said, "we're working on this research contract from EPA. We're trying to find out why all these people are getting along real well with all these high concentrations of mercury vapor in the air."

I said, "Well, I must admit that it is very impressive. When you go through town, you see all these guys there--ninety-year-old duffers, and nine-months-old babies, and they're all there, the whole profile. Something's happening there. What have you guys found out?"

They said, "We don't know anything for sure."

"Well," I said, "what's your tentative hypothesis? You've been here two years, you have to have something going."

He said, "We think that there's been a genetic adaptation. What do you think of that?"

"You really want me to tell you what I think of that? Look, I am a mining engineer and I don't know my ass from a hot rock about genetics, but I can tell you one thing, you are as full of crap as a Christmas goose."

"Why is that?"

"Well, first of all, the time span is wrong. You cannot have a genetic adaptation in two thousand years. Just out of it entirely. I know that, and I'm not an expert in this area at all. You'd better find something else."

"Well," he said, "that's about all we've been able to come up with. By the way, are you in the mining business?"

I said, "Yes, I happen to operate a mercury mine in Northern California."

"Oh, well."

"Now wait a minute, let's not go this 'Oh, well' bullshit. That doesn't make my opinions any less valid then yours. As a matter of fact, if you spent some time studying how the Spanish

government keeps their work force going in those mines, you'd probably have an answer to your question."

"What is it?"

"Well, they've learned to live with it; point number one. Point number two: the EPA standards are out of this world!"

"Well, how do you know that?"

"Well, I'm living under them; I have to work with them. The EPA standards weren't based on anything; they're just a big wild-ass guess, and they're phonier than a nine-dollar bill."

"How do you know that?"

"Well, exhibit A is right here: what you've been working on for two years. The other thing I happen to know is that the mercury content of a snowpack in the Sierra Nevada is higher than EPA standard."

"How do you know that?"

"Well, I'm in the business, goddamnit. I've been down there talking to some jerk-head in your outfit in San Francisco. I've been fighting it just to survive in the mining business."

"Well," he said, "where did you get the stuff about the snowpack?"

"Well, that's common knowledge. If you'd like to check it out--to make it interesting, I'll tell you what I'll do: I'll bet you a case of the best Spanish wine they've got around here. If I win, you can buy me a case; if you win, I'll buy you guys a case."

"How are we going to prove it?"

I said, "I'm going to let you prove it to yourself. You just call the overseas operator, pick any city you want on the Pacific Coast. Start with San Francisco, Oakland, San Diego. Call them up and tell them you want to talk to the water purification chief in any of those outfits. That's all. I don't even know what their names are, but call them up, and ask them what the mercury content is in a Sierra snowpack."

He said, "Why will they have it?"

"Well, hell, they make snow surveys there all through the wintertime. They bring the samples down and they analyze then for a whole lot of things. That's their raw material, the water they purify for all the people to drink on the Pacific coast."

"Well, by God, I just think you're wrong. I think I'll do that."

His partner said, "You better not do that. I think you're betting against the house. This guy knows what he's talking about." So, we didn't bet, but it was true. The Sierra snowpack has a .02 parts per million value.

Now let me tell you something: they came down and sampled our tailings pond over here at about this time of the year, when you're short of water and you have a very high concentration of whatever's in there. It checked out .02, which meant that the end-product in our mine up here, if it ever left as water, was .02, which is the same as the value in the Sierra snowpack. Now, you can check this out yourself by doing a little research, but it happens to be true.

Now to answer your question directly: we were up here at Oat Hill Mine since 1955; we shut down about 1975; that's twenty years. My partner, Ward, was retorting one day, and he got careless. Now one of the things that you know when you're running a retort is that you have a double-door seal and you have to carefully seal it off. You have to put the first door in, seal it with fire-ash and some other stuff; then you put the second one in, and when you do all this, why, you wear a mask, because that's the only dangerous time in the whole thing. Well, he didn't do it, and he had a bad seal, and then he did the foolish thing of--instead of just shutting the fire off and walking away, which is what he should have done, he tried to correct it while it was still heated up. And so he did--he started having trouble with his teeth, went to the doctor. He had gotten--what we term it is, got "squiffed." Got squiffed; meaning, he ingested some mercury vapor. Now, some facts: that's not the end of the world, because a lot of these miners in the last two thousand years in the Almaden mine had been getting squiffed from time to time. And they'd bring them up, they'd sweat the mercury out of them, put them on the surface, put them back to work. There's a lot of old-timers up here in these mines, here in California and elsewhere, that I'm sure had the same experience that my partner did. I retorted as many charges as Ward did. Because we did all the retorting on the weekend. That's where the money is. I wanted to do that myself while I was there. So the answer to your question is: yes, you could get squiffed. How would you know it? Well, your teeth might fall out, start having aches and pains.

I talked to a guy, a far greater authority in this area than I am. He's a doctor that used to practice down in Calistoga. He's practicing now here, Middletown. I'm trying to think of his name; it's an Italian name. I've talked to him at great length about it, and he brings out just about the same thing I'm saying to you: locally, if you got careless, yes. Do you die? No.

Now, in World War I--this is a fact, and you can check this out to your satisfaction--our medical department in the army used metallic mercury, and gave it to soldiers to ingest when they wanted to clear out some of their--I forget what the hell their medical problems were. So we had American soldiers ingesting mercury. Now, you can take a teacup full of mercury and drink it yourself. A, you would not die; B, it would go through your system. I know you probably don't believe this, but it happens to be factual. We also used mercury as an ointment with the soldiers in World War I, and World War II; a blue ointment that they would give to soldiers if the boys had been out with girls that were not quite clean. So anyway, you have a whole lot of people working in the mercury mining industry. So, if you want a list--I'm sure in my own mind, if you listed the hazards to life and limb in all aspects of mining--just in the mercury mining industry--guys that got killed in the tunnel, guys that broke a leg or an arm, or something else, got a hand caught, I'm sure that getting squiffed would be down at about one percent of all the other hazards. Mining is a very dangerous thing, and in the old days, even more so. Today, it's a whole lot different situation. But in the old days, if we went back to the old Homestake mine in Lead, South Dakota, and you look at the accident statistics, your hair would stand on end, but we lived in that kind of a time.

Cured of Smoking by a Chinese Doctor

Kritikos: I want to tell you something about this doctor here in Middletown. When Jacqueline and I were in mainland China, I told you we took Gary along because my son Gary was a Marxist; he'd been indoctrinated down at San Jose State. So we made a capitalist out of him by the time the trip was over with. But I was sick as a cat when we got to Hong Kong, and I thought I had the flu or some goddamn thing. So when we reached the mainland, I told this little Chinese tour director, I said, "Hey, how about taking me over to the hospital there. I want to get a shot, a flu shot or something." So we went over to this hospital. Dingy-looking goddamn place. Have you ever been in a Chinese hospital?

Swent: Yes, I have. Not as a patient, but I've visited there a couple of times.

Kritikos: They're pretty messy looking, right?

Swent: Yes.

Kritikos: So we go in there, and here's this little Chinese lady doctor there. She's about 4'8"; she reminded me of my mother, because my mother was only about 4'8". This little gal probably didn't weigh

over ninety-two pounds soaking wet. So she starts signaling to the gal there, and the interpreter or tour guide there said, "She wants you to drop your pants."

And so I dropped my pants. I don't know what the hell is going to go on. Next thing I know, she had jabbed me in the butt with a big hypodermic, big enough to put on a horse! [laughter] I didn't say anything. Then she gave me a little bottle with some white pills in it; a bunch of Chinese writing on the outside, and some Latin. I thanked her, and thanked the tour guide, and went back to the hotel.

We were sitting down after dinner, and my wife said, "Are you sick, Bill?"

"No, I'm not sick. Why do you think I'm sick?"

She said, "You're not smoking any cigars; you're not smoking your Meerschaum pipe."

I said, "Don't break the spell, Jacqueline. Right now, I'm not disposed to smoke anything. Let's not even talk about it." I haven't smoked since then. Now--and this is a true story--at that time, I would smoke a pound of tobacco a month; walnut tobacco. I had Meerschaum pipes, and I loved to smoke that walnut tobacco in the Meerschaum pipes. Not only that, I smoked a box of Cuban cigars a month. I would go through several different deals to get these Cuban cigars because that was illegal. I haven't smoked a lick since then.

Swent: Completely lost your--

Kritikos: Bam! Just like that. So when we came back to Middletown, I went in to see this doctor, this Italian fellow that used to practice down at Calistoga; told him the story. "Well, you've got to be shittin' me, Bill. Where do you come off with all that crap?"

I said, "Well, that happens to be the truth."

He said, "Haven't smoked a bit?"

I said, "That's right."

"Don't you feel the urge?"

"Absolutely not. In fact, I get mad at Jacqueline when she lights a cigarette. I can tell when she has lit a cigarette in the house." Nothing like an old sinner to be sensitive. [laughter]

He said, "Boy, this is really something. Did you have

anything--bring a medicine package back from mainland China?"

I said, "Yes, as a matter of fact, I have a little package there. It's got a bunch of Chinese writing on it. I can't read that, but it's got a Latin phrase on there, and if I remember anything about my Latin, it says something about a gold compound, so my hunch is that this is a gold compound of some kind that the Chinese had in these pills."

I brought it to him a week later. He sat there looking at it, shaking his head. He'd pick it up, adjust his glasses, read it again, shake his head. "Jesus Christ!" He kept saying, "Jesus Christ!"

I said, "What the hell's the matter? Am I supposed to be dead or what?"

"Well, what we ought to do: I ought to quit my goddamn practice, and you and I will open up a smoking clinic. We got the problem licked." That's the last I've seen of it, but I think the Chinese were on to something there, and I have learned not to underestimate these fellows. They swung out of the trees earlier than we did, and they've been on the planet longer, and I'm not going to be the first to poke fun at them at anything. When you get into their ball game, you better believe you better be wide awake, you know.

Swent: That's an amazing story.

Kritikos: Isn't it? And I haven't--

Swent: Did it cure your flu as well?

Kritikos: Yes. Got over it.

Swent: And you completely lost the urge to smoke.

Kritikos: That's right, I haven't smoked a lick! And you know, prior to that, my wife and I would argue all the time, because we travel a lot--we've been traveling a lot for twenty-five years, you know--so we'd get on these tours, and you get into the tour bus with fifty people in there, and all the little old ladies are up front in the choice seats, and all the sinners are sitting in the back seats to smoke. At that time, I liked cigars. I would light up the cigars, you know. In about twenty seconds, the little old ladies up front would be gasping for breath and raising hell. And Jacqueline used to beat up on me all the time: "You shouldn't do that, Bill. Why don't you wait until you get out of the bus during a bus stop?"

"Well, Christ," I said, "I've paid a full fare. Screw them!

If they can't stand it, let them stay home." It wasn't a very civil thing to do, but I'm confessing my attitude towards this. [laughter] So now I see what they were up against because--

Swent: You feel the same way.

Kritikos: Yes! Now, Jacqueline has given up on smoking, so she doesn't smoke any more either. But listen, she would light up a cigarette and I would be sitting over there in my office and right away I started getting uncomfortable! Really! So, even though the second-hand-smoke routine has been pretty much overdone, there's no question in my mind that when people do not smoke, they are very sensitive to smoke. There's no question about that. You learn a few things in life; that was one of them. The guy's name down here is Palladini, Dr. Palladini. He used to have a practice down in Calistoga. He has a practice here.

Mining in the Old Days; Hazards with Furnaces

Kritikos: When Dr. Palladini had an office in Calistoga in recent years, before he moved up here, he treated--he dealt with a lot of people who worked in the mercury mines. I don't know if you know, but you had mercury mines all up and down Napa Valley. You're aware of that.

Swent: There were dozens of them. And I've heard stories about all their teeth falling out; that was one of the symptoms. So there must have been people around here who had that problem.

Kritikos: But they weren't taking care of themselves. You probably know that in the old days here, say from the 1870s on, when you were mining mercury on a fairly large scale in California the process then consisted of digging out your ore, bringing it over to a Scott furnace. Have you even seen a Scott furnace?

Swent: I've just seen pictures of them.

Kritikos: Just seen pictures of them, right? You feed those from the top, and then you have shelves in there as the ore comes down. You control the descent of the ore by how you draw it out at the bottom. And you fire these things--you used to fire them with manzanita and things like that. By the way, manzanita makes a very hot fire. It was a very crude system, is what I'm driving at. Not only that, in those old Scott furnaces, you recovered your mercury in a condenser chamber adjacent to the furnace. What you did there, you convey your products of combustion with your mercury vapor into these chambers, and then you separate it out at different temperatures. Very difficult process; very sloppy

process. Those condenser chambers and the Scott furnaces were generally of masonry. For instance, some of them in places like this were built with rock that was native to the countryside at the time. So, because of the heat effects, expansion and contraction at a variation of temperatures, you would have leaks. So there were a lot of leaks around Scott furnaces. The ground was soaked with it and all that. But the surprising thing to me is: with all that kind of an environment, you didn't have any more people that kicked the bucket.

Swent: These Scott furnaces were vertical?

Kritikos: Yes.

Swent: And then they came in with the rotary kiln, which was horizontal?

Kritikos: Yes. That came in much later.

Swent: And they were not made of masonry?

Kritikos: No! Oh, no. Have you ever been to a cement plant? Seen the cement kiln?

Swent: Yes. Right.

Kritikos: Okay. But there you had the same problem, you had a product of combustion first--if you're firing the furnace with natural gas or wood or oil or what, those combustion products have to leave the furnace. At the same time, when you vaporize the ore, when you charge the ore into the furnace like that, you're charging walnut-size pieces of ore, and it's cascading as the furnace rotates, and as it vaporizes into mercury, that mixes with the combustion products. There's no way you can separate the two until you put them into the condensation system. In the condensation system, what you're trying to do, you're trying to maintain the optimum overall temperature in the gases--the exhaust gases--and maximum retention of the mercury vapor. That's a relatively tricky thing to do. That's where your hazard came from in the mercury operation.

It was not necessarily in the mining. Some in the mining, but if you didn't have mercury vapor in the tunnel--very little chance there--where you got it was in the furnacing end; whether on the rotary furnace or a Scott furnace. There's some material here that I set out; you probably got it at the library there, and you can look it up, if you haven't looked at it already, and it will fill you in. You can take a look at it there. So actually, it was not--compared to all the other risks attendant to mercury mining, which were common to all forms of mining--mining in those days was a very dangerous business. Nothing about it was easy. But getting mercury poisoning was not the biggest hazard. The

proof in that pudding is how they have operated the Almaden mine in Spain. All you got to do is look up the article in National Geographic, and you get the whole picture. They kept a good work force there, you have a normal profile of people living all around there, and it's been going on for two thousand years. So if it looks like a duck, and walks like a duck, and quacks like a duck, it's not a kangaroo, right?

Swent: Right.

Kritikos: Regardless of how many Ph.D.'s we have around here pontificating, that is a fact that you've got to explain away somehow, right?

Swent: I asked you about your power, and you explained about your own generators, but what were you using as fuel?

Kritikos: Propane.

Swent: You used propane also?

Kritikos: Yes. Tell you something: right now propane is right around 95¢ or a dollar a gallon, right? Our first load of propane that we got down there at Oat Hill Mine was--we had a guy, a fellow named Hughes, he's a little gyppo propane dealer in Calistoga at the time; we let him bring in our first load.

Swent: So you were using it for your retort as well as in your generator?

Kritikos: Yes.

Swent: The whole thing?

Kritikos: Yes. Had a separate tank up there near the retort, and had this big storage generator there. 6¢ a gallon! That's the first load that Hughes brought in for us. And so, we had a pretty damn efficient operation. We converted over these engines. We'd buy these engines at war surplus. For example, one time we bought some Waukesha engines. Waukeshas are well-known engines, but they are large pistons, large bores, and real gas gulpers when you use them for gasoline, but we would convert them over, change the manifold, and put them on propane. Just worked like a charm. Low-cost; in fact I was kidding the PG&E guy one day that came out there--he was out of the office in Lakeport--he said, "Well, you got a pretty good operation here, Bill."

I said, "Yes, actually we're producing KWH's cheaper than you boys can do it. Looking aside from the hundred grand you wanted to stick us to bring your power lines in."

He said, "Well, I can't account for all that, but I don't doubt that you're right, and you're producing this cheaply."

A Dim Future for Mercury Mining

Swent: Do you think you'll open it up again?

Kritikos: The mine?

Swent: Yes.

Kritikos: No. I'll tell you why you can't. Very simple fact: the valley is controlled by the people that are in the wine business. Hundreds of millions of dollars have been invested in the wine business. Unless we change the way we operate the government systems in the United States, you are never going to do anything that gives those people that have their money invested in the wine business room for concern. They don't want mining; they don't want anything that runs the tourists away, or in any way upsets them in selling their wine. They call the shots!

Swent: You don't think they would let a mercury mine open up again?

Kritikos: No, absolutely not. Why should they do that? If you want to open up a mercury mine, and I had a winery down there, and I had five million bucks invested in it, I wouldn't give you the time of day. I'd chop you off at the ankles if you tried to come in and get a permit.

Swent: Where is--your watershed doesn't go to Napa Valley, does it?

Kritikos: No, no. But, the mine is in Napa County, so to get a permit to operate, I've got to go before the Napa County Planning Commission, right? Guess who runs that one? The folks in the wine business have got their members all over that commission.

Swent: Homestake managed to do it.

Kritikos: Okay, now. You bet. Let's examine why. Homestake had real smart people--very sensitive people in the environmental field. A program record. Plus the fact that Homestake's operation over there cannot, in any way, endanger the vineyards down here. Right? Correct?

Swent: Right.

Kritikos: So there's no way they can physically harm--even though it's true, part of the operation here is in Napa County--but there's no way they can hurt the wine business down here.

Swent: But wouldn't that be true of your operation, also?

Kritikos: Yes, except we're little guys and we can't do what Homestake did.

[laughter] And I give you as Exhibit A what the young fellow said in the planning department. Remember he said, "It's a lucky thing, Bill; we'd never let you open up again." That's not exactly a law; it's not like saying, never, never, never. Theoretically, you could have a tremendous depression in this county--and a whole lot of smart people think we're headed that way--but suppose you went back to the Depression years that I knew as a young boy growing up in Oklahoma, well, a whole lot of things can change. One of the first things to go out the window will be the excess zeal in environmentalism. There's going to have to be a balance struck. But the point is what has happened in the mercury mining business--you can't rerun the tape and do it over again.

What you have done, because of all the environmental emphasis on it, the market has gone. You don't use mercury for antifouling paints on ships. The biggest loss is in the process of taking chlorine out of the ocean and treating it. You had a mercury cell process, and you had another one that generated losses of mercury every year. That method is no longer used. That's point number one. The market has gone.

Swent: And it's not used for batteries anymore.

Kritikos: Right, right. So the point is that today I think--this is just my own "hokey-Joe" opinion--I think that, first all, we're not running out of minerals worldwide, despite the Club of Rome and all the knotheads that are predicting disaster. We're going to have all the minerals we want as we need them, within reasonable choices. And there's substitute things; the same way that you have substituted things for mercury. You don't mess around with mercury any more; there's no market there.

Swent: That's right.

Kritikos: So that's the long and short of it. That's why there's no doubt in my mind that you won't see any production here. Here's another reason; let me show you a very simple one: suppose now Napa County was nice enough to let us operate, and suppose we were operating a mine real fine but we had a bad winter and we lost part of the tailings dam and that stuff came cascading down here, wiped out this dam, and went down into Detert Reservoir.

Swent: Which reservoir?

Kritikos: If you take out of here and you go back to Pope Valley, you're going to pass this lake on your right-hand side. That is Detert Reservoir. Do you know who owns Detert Reservoir? The Magoon estate in Hawaii. Do you know who had it before? Have you heard of Lily Langtry?

Swent: Oh, yes.

Kritikos: Okay. That was her house up there and she used to ride on horseback from there through here, over to where the Livermores are now. Did you know that?

Swent: I've heard that.

Kritikos: So, what would happen if all these tailings cut loose; muddied up the water down at Detert? I have committed a bad act as operator of this mine, and I'm going to get sued for everything I've got. So the other factor is there are very few enterprises that can withstand that risk. For instance, now there's a lot of gold producers in Nevada. They're starting to have second thoughts because the environmentalists are getting hot there, too. And before it's all over with, you may mess up a very important gold resource there. It all has to do with lawyers and the fact that you don't know what you have until you make your final pass in court. So if you don't have a big bank account, better not get in there.

Swent: That's right.

Kritikos: If you came to me and said, "Here, I've got a plant ready to go, Bill. I like the cut of your jib; I'm willing to give this to you for a dollar," you couldn't run fast enough to give it to me for a dollar because I run the risk of producing a fortune here maybe, but coughing that off in the courts twenty years later. Who wants to do that?

Swent: No.

Kritikos: All right. Now, for instance, John Livermore spends a lot of time going overseas to South America looking at mines. There's a lot of other mining people that are over there. Homestake is doing the same thing. The reason they're doing that is--I had a guy tell me one time, a mining engineer, he said, "I'd rather pay those crooks off in South America so long as I can figure the job." He says, "I can get out of there in three years with my capital back; I don't care how much I paid him off. But that's a known expense, I know what it's going to cost me. I can't do that with lawyers in the United States." That is a very big, crude fact of life.

Swent: Well, Bill, I think we've covered it pretty well. Is there anything else that you--

Kritikos: No. Don't hesitate to give me a call anytime if something comes up.

Swent: You were well prepared.

Kritikos: I know it pretty well.

Swent: You had organized it very well.

Kritikos: Yes, in fact, I got all this stuff out this morning one more time.

Swent: I can tell that.

Kritikos: I want to show you some things here. [shows collection of cinnabar specimens and products]

Transcriber: Estevan Sifuentes
Final Typist: Amelia Archer

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Berkeley, California

Western Mining in the Twentieth Century Series
Knoxville/McLaughlin Project

Jack Landman

RANCHER, MORGAN VALLEY

An Interview Conducted by
Eleanor Swent
in 1996

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Since 1954 the Regional Oral History Office has been interviewing leading participants in or well-placed witnesses to major events in the development of Northern California, the West, and the Nation. Oral history is a method of collecting historical information through tape-recorded interviews between a narrator with firsthand knowledge of historically significant events and a well-informed interviewer, with the goal of preserving substantive additions to the historical record. The tape recording is transcribed, lightly edited for continuity and clarity, and reviewed by the interviewee. The corrected manuscript is indexed, bound with photographs and illustrative materials, and placed in The Bancroft Library at the University of California, Berkeley, and in other research collections for scholarly use. Because it is primary material, oral history is not intended to present the final, verified, or complete narrative of events. It is a spoken account, offered by the interviewee in response to questioning, and as such it is reflective, partisan, deeply involved, and irreplaceable.

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It is recommended that this oral history be cited as follows:

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Copy no. _____

Jack Landman at Clearlake, 1978.

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INTERVIEW HISTORY--Jack Landman

Jack Landman's grandfather settled in Morgan Valley in the 1800s, and he has lived most of his life on land now occupied by the McLaughlin Mine processing plant. Interviewing him was important in documenting the development of the mine, and he was a willing interviewee. I got in touch with him both by letter and by telephone in October 1995, and interviewed him at his home on Seigler Canyon Road near Lower Lake on 1 June 1996.

Born in San Francisco in 1915, Landman spent his childhood in Oakland, and from the age of ten, attended the Morgan Valley School and lived on his grandfather's ranch on Reiff Road. After graduation from Berkeley High School in 1932, he returned to the family ranch. He bought his first tractor in the late 1930s; until then horses were the only aid to manpower. He raised cattle which were sold to Elmer Kelsey's slaughterhouse in Kelseyville; at one time he also raised sheep and hogs. In his interview, he tells how he gradually concentrated on improving his herd of cattle, cross-breeding Herefords with Black Angus, increasing his rangeland ownership, and gaining self-sufficiency.

He worked at the Bradley Mining Company's Reed Mine, near Knoxville, during the World War II mercury boom. He was a laborer on the surface, living in a tent with three other men and eating at the company cookhouse. He praises the ample good food which was provided as part of the Bradley policy of treating employees well. He worked dumping mine cars of waste, maintaining the road, building a telephone line, and hauling lumber. He worked for a time hauling mail for the Reiff post office; he also did some hauling for the neighboring Harrison and Red Elephant Mines.

In 1972, Landman sold all but fifty acres of his ranch to a developer who planned to sell home sites. When Homestake came in hunting for gold, he says, "It spoiled it for ranching....With that highway coming through the property, it was impossible to raise livestock any more on account of the fences....It improved the road, that's one thing. And where it used to take three-quarters of an hour to come to Lower Lake, now it only takes about fifteen minutes." When asked about the town meetings which Homestake sponsored, he said he never went to them, because "There's nothing we could do about what they're doing."

He subsequently sold the remainder of his ranch to William Wilder (owner of the mercury mine where the gold was found) and moved to the walnut farm where he now lives. He gives a poignant picture of the difficulties of small ranching and farming; had he held out a few years longer, he might have sold his land for a higher price. He expresses

concern about environmental damage to the land he so clearly loves, but also decries some of the excesses of bureaucratic regulations. He acknowledges the Lower Lake Action Club's effectiveness in blocking a recent power line proposal near his property. This interview gives a frank personal account of the impact of the McLaughlin Mine on one of its nearest neighbors.

The tapes of the interview were transcribed in the Regional Oral History Office and the lightly edited transcript was sent to Jack Landman for review. He made several minor clarifications of diction and returned the transcript promptly. The manuscript was corrected and indexed at our office. The tapes are deposited in The Bancroft Library and are available for study.

The Jack Landman interview is one of more than forty interviews which were conducted by the Regional Oral History Office from 1993-1997 in order to document the development of the McLaughlin gold mine in the Knoxville District of Lake, Napa, and Yolo Counties, California, from 1978-1997, as part of the ongoing oral history series devoted to Western Mining in the Twentieth Century. The Regional Oral History Office was established in 1954 to record the lives of persons who have contributed significantly to the history of California and the West. The office is a division of The Bancroft Library and is under the direction of Willa K. Baum.

Eleanor Swent
Project Director, Research Interviewer/Editor

Regional Oral History Office
The Bancroft Library
University of California, Berkeley
February 1999

Regional Oral History Office
Room 486 The Bancroft Library

University of California
Berkeley, California 94720

BIOGRAPHICAL INFORMATION

(Please write clearly. Use black ink.)

Your full name Jack Samuel Landman

Date of birth 5-3-1915 Birthplace San Fransisco

Father's full name JACK LANDMAN

Occupation NON proffesional Birthplace Colorado

Mother's full name CUSSIE BOSE LANDMAN

Occupation house wife & rnch owner Birthplace Lake County

Your spouse Barbara Irene Landman

Occupation nurse Birthplace Fresno

Your children none of my own.

Where did you grow up? Lake County

Present community Lower Lake

Education High school

Occupation(s) ranching

Areas of expertise operating of machinery

Other interests or activities hunting, other outdoor activities

Organizations in which you are active none at the present time

INTERVIEW WITH JACK LANDMAN

RANCHING IN THE LOWER LAKE AREA, 1925 TO 1966

[Interview 1: June 1, 1996] ##[1]

The Bose/Reiff Ranch in Morgan Valley

Swent: Jack Landman is interviewing in Lower Lake, California, on June 1, 1996.

I'd like to ask you first just to tell me where you were born and when, and when you came up here to this area.

Landman: Well, I was born in San Francisco at the University of California Hospital on May 3, 1915.

Swent: Did your family live in San Francisco?

Landman: No, in Oakland. And then I came to Lake County as a boy of ten years old in 1925, as we had a ranch in Morgan Valley which my grandfather had lived on until he passed away.

Swent: Your grandfather must have settled here very early, then.

Landman: Yes, in the 1800s.

Swent: No connection with the gold rush.

Landman: No.

So then as a boy I grew up and went to school in Morgan Valley until I was about, oh, twelve or thirteen years old. Then I moved to Berkeley with an aunt of mine and went to school; finished schooling in Berkeley, until I graduated from Berkeley High School.

---

[1]## This symbol indicates that a tape or tape segment has begun or ended. A guide to the tapes follows the transcript.

Swent: When did you graduate?

Landman: Nineteen thirty-two. So then I came back to the ranch in about 1932 and there was my mother and brother and a sister, and we farmed the ranch from then on.

Swent: What did you have on the ranch? You said you farmed.

Landman: Well, we had hogs and cattle and horses.

Swent: Any pears or walnuts?

Landman: No, it's strictly livestock out there.

Swent: How many acres did you have?

Landman: We had about 640 acres at the beginning. At the beginning, my step-great-grandfather, Reiff, and my grandfather, Bose, were partners.

Swent: Oh, Reiff Road, then.

Landman: That was the first post office out there, was Reiff.

Swent: That was your step-great-grandfather.

Landman: Right.

Swent: Your great-grandmother's second husband?

Landman: It was my great-grandmother's second marriage. I don't know what become of my great-grandfather, Bose, but she married John Reiff, which was the adjoining ranch, now known as the Bose Ranch. It was all one at that time. And then Reiff and my grandfather divided the ranch in two and Bose went on with his portion, and Reiff stayed on the portion which is the Reiff Ranch.

When I started ranching, I didn't know much about ranching, so my neighbors helped me out. We farmed with horses at that time. We did that until we bought our first tractor and that was in the late thirties. Yes, in the late thirties we got a tractor.

Swent: What brand was it?

Landman: It was what they called a Fordson. It's the first tractor that Henry Ford put out.

Swent: What did you do with the cattle?

Landman: We had range, and then we raised hay for them, and then you sold off the ones that were saleable.

Swent: Where did you sell them?

Landman: To local slaughterhouses. Kelseyville. Elmer Kelsey had a slaughterhouse in Kelseyville, and also a butcher shop. He bought a good portion of the livestock around here. What he didn't buy the larger ranchers would haul to South San Francisco, like the Garners and the bigger ranchers, and the Joneses. They sold outside the county.

Swent: What kind of cattle did you have?

Landman: Herefords, mostly. And then in later years I gradually built up --we had sheep, too. And then we sold the sheep and went entirely into cattle. We crossed the Hereford with the Black Angus, and that's what we stayed with until the end.

Swent: What kind of sheep did you have?

Landman: We had Cordales as the breeding stock and then we would get Suffolk bucks to get the lambs. They made better lambs than a straight Cordale.

Swent: Did you get any help from [the University of California at] Davis or county extension or anybody like that?

Landman: Not exactly. We didn't need any until they had a bad winter out there and we ran out of feed for the sheep. I was hauling feed from Lower Lake and there was snow on the ground, you know. I was feeding barley with a little hay, and that filled--well, it didn't fill the troughs, but I put barley in the feed troughs for the lambs. I was creep feeding them.

Swent: You were what?

Landman: Creep feeding. That's where you have a place where the lambs or small stuff can get in away from the large stuff and have their feed to themselves. We had them partitioned off.

So it was dark when I got back with the feed that night. I couldn't get up to the barn on account of the snow on the road, so I went up the next morning and some of the lambs were laying in there swollen. They bloated. They ate too much grain, so what I did, I put one--I had a Dodge touring car, and I took it to Davis. We knew, oh, I can't think of his name now. He was the head one in the agricultural department down there in the

veterinarian end of it. And he wasn't at home, so I took it to a vet in Woodland and they gave me some medication.

You see, what happens is the grain swells and then they get bloated and then it affects their heart and it kills them. So we lost quite a number, and that's the only time I ever went to Davis about anything, was on that occasion.

Swent: Did you get any supplies from Monticello?

Landman: No, I never did buy any grain down that way. I bought cattle at Scribner's, who were at that time in Berryessa Valley. That's when we got started in the cattle. I started buying calves and raising them up and selling the ones that I wanted to sell and keeping the breeding stock, and that's how we built up our herd of cattle and finally went into cattle altogether. So that was about all that we bought in Berryessa Valley.

Swent: Mostly it was here in Lower Lake.

Landman: No, I would haul some from Napa. Sometimes I'd go to Napa Milling and haul feed in for them.

Swent: How did you get down there?

Landman: Well, I had a Dodge touring car and a trailer [chuckling], and I would go down there and get a load and then haul it home.

Swent: Did you go through Calistoga?

Landman: Yes, over the mountain--right.

Swent: That was quite a haul.

Landman: Yes, it was. See, Napa Milling was a pretty big feed mill down over there. They're out of business now. They're no longer operating.

Swent: How long would it take you to get down there?

Landman: Oh, I don't know. A couple of hours, at least. The roads was good then. They were paved at that time. It wasn't a toll road like it was when we first came up here. It was a dirt road over the mountain.

So then I bought feed from Kugelman Ranch down here. He was in the feed business and he raised hogs. When I was raising hogs, I would sell him feeder hogs and buy grain from him, and

then he raised them on up to slaughter size, and then he'd offer to sell in San Francisco.

We gradually built up. By that time, the Reiff Ranch had changed hands. I started running it and it gave us some more property. And I started raising more of my feed for myself, so we didn't have to buy so much for what we needed. I did buy hay. I hauled hay from Woodland and other places when we were short.

Swent: Did the Depression bother you much?

Landman: Yes, it did. I could show you some of the bills. Our grocery bill sometimes would run about $300 a year and sometimes we couldn't pay all of that; we'd have to wait till we sold something.

Swent: But you grew a lot of your own food, I suppose.

Landman: Well, yes. You butchered. You had your own pork and bacon and things like that. Of course you bought flour by the sack, and sugar. My mother baked bread and things.

Swent: Did you have a vegetable garden?

Landman: Yes, to a certain extent. We were a little bit short on water for that, and we raised a small garden.

Swent: What did you do for water?

Landman: We had wells. You baled it out by hand, and then we had hand pumps on one or two of them. Finally we got into putting pumps in and having--well, we had a reserve tank up on a windmill tower, but we had running water in the house.

Swent: What did you use for power?

Landman: We didn't have any power. We had kerosene lights and woodstoves and a wood cookstove. I still have that in the garage out there. It had a hot water tank on the side.

Swent: Did you have water in your kitchen?

Landman: Yes.

Swent: And an inside bathroom?

Landman: Yes.

Swent: But you did have water in the kitchen.

Landman: Yes, right.

Swent: A pump by the sink?

Landman: No, we had a reserve tank up on the tower with the windmill, and that's the way we got our water.

Swent: It was a windmill. It was wind power.

Landman: Yes, until finally we put an engine on the pump and then we would pump it with a gasoline motor.

Working for Bradley Mining Company at the Reed Mine, World War II

Landman: So anyway, in later years I went to work for the Bradleys at the Reed Mine. They moved in there in about 1939 or 1940, but it wasn't developed at that time so they would haul the ore that was waste ore down from the Reed Mine to the Bradley mine at Sulphur Bank and mill that.

Swent: So this was ore that had been left by a previous mine owner?

Landman: Right, yes.

Swent: And how do you spell Reed? I have heard--

Landman: R-double e-d.

Swent: --lots of different spellings. And this was a mercury mine.

Landman: Right. So then Bradleys moved in there and started development on it and put a drift in, which is a tunnel, and started mining there.

Swent: Now, how far was this from your ranch?

Landman: It's about four miles from the ranch down to the mine.

Swent: Not very far.

Landman: No.

Swent: West? No, east.

Landman: East, right. The mine is down where Homestake has the dam now. They bought that all up. The mill is still setting up on the hill, I think.

Swent: Was there a good road from your place?

Landman: No, just a dirt road. In the winter, of course, it was closed because it was impassable. Then you had to go out on a county road and go down around to Knoxville and come into the Reed Mine that way. There was a road between Knoxville and the Reed Mine.

Swent: What county road?

Landman: It would be in Napa County. See, Knoxville is in Napa County.

Swent: But you'd go from your place--

Landman: Well, I don't know if you're familiar with the road out there or not. Have you been out there?

Swent: Yes.

Landman: Well, the Reiff Road forks off. You can look out and see that big lake?

Swent: Yes.

Landman: The main road, then, they closed it off. There's a gate there. And it went down that way, where Reiff Road took and went off down the hill, so you'd have to come up and go down the main road, which is a Lake County road, to the Napa line. And then you're in Napa County, which is all paved down there now. And that's the way you'd go down, as far as Knoxville, where the old hotel used to be. And then you would turn into that road, which would take you into the Reed Mine, which is about a quarter mile. So that's the way they had to go in there, because most of the ones that were working there came from Lower Lake or the Highlands. And they traveled that road all the time, except they would take the Reiff Road as long as it was open.

Swent: You said you weren't sure how many people worked there, but can you guess?

Landman: No.

Swent: Was it 400 or fifty?

Landman: Well, I'd say it was fifty or better--between fifty and a hundred.

Swent: A nice-sized operation, then.

Landman: Yes, it was. See, they run night and day. They never stopped. So they had the day crew and the night crew underground, and then the furnace operated all the time. They had electric motors. They would go in with about six or eight or more--ten cars--dump cars. I don't know if you're familiar with an ore car, anyway.

Swent: Yes.

Landman: They had chutes. They would elevate the ore up into bins, what they called stokes, which was a big bin in there, and they would load the ore cars underground and then bring them out to where--the mill was up on a hillside, and they had a tram that hauled. They'd hook onto one or two ore cars at the foot of the hill and tram it up to a big bin, and that's the way they dumped the ore in.

Swent: Oh, the drift was down lower?

Landman: Oh, yes. It went under the mountain. The mill is set up on a hill, and the tram comes down here. And they would hook on one or two ore cars and tram it up and dump it in the bins and then leave the empties back down and hook onto two more till they emptied that train, see. And sometimes they would bring out just a tramload of waste and they would haul that on down the side and dump it over. They wouldn't be hoisting that up, you know.

Swent: Is that Davis Creek?

Landman: Yes. Davis Creek. So then, from the ore bin it went into this furnace, which was a rotary furnace, and it would run about fourteen hundred to fifteen hundred degrees. It would run this ore for about seventy-five or a hundred feet, which the furnace was in length, at an angle, and it just rotated slowly. And by the time it got down there the ore had half-burned and the fumes would go up through a vent and go through a condenser system, which condensed the steam into mercury. So that was the way they got the mercury out of the ore and out of the cinnabar.

Swent: What was your connection with this?

Landman: I was just a plain laborer.

Swent: You hired on there as a laborer.

Landman: Yes. I didn't go underground.

Swent: How did you get the job?

Landman: Well, you just go down and apply for it.

Swent: Out there at the mine?

Landman: Right. The superintendent, whose name was Ray Butterfield, was a very good man. He was an old-time miner.

Swent: So you went out and talked to him.

Landman: Yes. That's where you applied, at the office. See, they had an office there, also.

Swent: What did they pay you?

Landman: I think I was getting about a $150 a month.

Swent: Was it by the hour? By the month?

Landman: By the month. You worked so many days. You didn't work Sundays, but you worked six days at the ranch.

Swent: What sort of hours did you work?

Landman: You just put in eight hours.

Swent: Eight hours. Were there any benefits at all?

Landman: Nothing but Social Security. Of course, you had to have a card at that time, in 1940, '41.

Swent: Did they give you any sort of physical exam?

Landman: No, no. A lot of the miners came from another mine they had up north. I don't remember the name of the mine now. They just moved down there. See, they had a bunkhouse. See, you got your meals. They fed real good, three times a day. So that went along with the job.

Swent: Did you eat lunch at the bunkhouse?

Landman: Well, I lived there. Four of us lived in a squad tent. They had cabins for some of the help. They had about ten small homes for some of them, the singles lived in the bunkhouse, and four of us lived in a squad tent.

Swent: Were you single at that time?

Landman: Yes.

Swent: So did you carry a bucket for lunch?

Landman: No, I was working on top, see, and I was always there at noon. The night crew would come down and eat, and then they'd sleep during the day as much as they could. And then, of course, the day crews, they all took an hour off for lunch. The Bradleys fed really good.

Swent: What sort of food did you have?

Landman: Whatever everybody eats. You had salads and soup and meat. Good, solid foods. Ice cream and cake the cooks would bake.

Swent: Good pie?

Landman: Oh, yes. Ice cream. They had their own refrigeration unit there.

They had big diesel equipment there, running night and day, for generation of juice, for electricity, because they had to have electricity there for everything. And they would run night and day. Of course, they always had one for standby in case one broke down. See, Knoxville had electricity that far, but Gambles owned the line from Knoxville to Monticello and they didn't want to release any rights to it to Bradleys, so Bradleys had to furnish their own power until they finally got together and ran the electric into the Reed. I don't remember now how long the mine run. Right after the war.

Swent: Did it run all through the war?

Landman: Oh, yes. They produced a lot of mercury between Sulphur Bank and Reed Mine. Of course that was well needed there during the war, you know.

Swent: How did they ship it out, do you know?

Landman: Yes, they shipped it by truck to what they called Winters, where the railroad was. You go down through Putah Creek. That was before the dam was built. And that's where they would reload it onto trains and haul it.

Swent: That was down through Monticello?

Landman: Yes, it went through Berryessa Valley, right, and down Putah Creek Canyon. And then I don't know what become of it after they shipped it, where it went.

Swent: So what exactly was your job? Do you want to just kind of go through--

Landman: Well, yes. I was on the road maintenance. There was quite a bit of work to be done to keep the road open, especially in the winter.

Swent: How much snow do you get up there in the winter?

Landman: It varied. There at the ranch, one time, I don't remember which year it was, we had about two feet. It started in right after Christmas. That's generally when the first storms hit, right about the end of December. And we were snowed in for about two weeks, and it was about two feet of snow. In those days, they didn't have motor graders. They had a bulldozer pulling a grader. So they came in, I think it was either New Year's Day or later, and bladed it off. And then the wind came up and drifted it back in and we were snowed in for about another two weeks. That was one of the worst winters. We had several bad, snowy ones.

Swent: This was before the war, too?

Landman: Well, let's see. Yes, I think it was. It was before the mine had opened up, because after the mine opened up they pretty well tried to keep that road open as long as they could. But not in the snow they didn't. They had their own road maintenance, and they would keep that road open as long as possible for the miners to go back and forth. They called it the shortcut to Lower Lake because it cut off quite a bit of mileage. Only six miles to the main road.

Swent: Six miles from the Reed Mine?

Landman: From the mine, yes. Close to six. It was about four over the hill and then about two. And that's where they hit the road where Reiff Road goes into the main road. Then that's where it hit up there, where you could see the lake, that's where you hit the main road.

Swent: Now, when you say lake, you mean--?

Landman: That lake that Homestake has there.

Swent: The tailings pond. Yes, okay, but there wasn't a lake there then.

Landman: No. No, that belonged to my grandfather's sister. They owned that ranch. It was a good ranch.

Swent: What was the name of that?

Landman: Ebbinghousen.

Swent: That's German? Were these people Germans?

Landman: Yes, I guess so. Or Dutch. I don't know. Everybody was related out there then. See, Mrs. Ebbinghousen was my grandfather's sister and they had a ranch in the valley, too. Next door to us was one son's ranch, and up in the valley was the other son's ranch in Morgan Valley.

Swent: Was there a Morgan?

Landman: That was the upper end. We call the upper end Morgan Valley. It was kind of divided by a little ridge of mountains. I don't know when Morgan first settled there. And then on our side was called Hunting Valley. There was a Hunting.

Swent: Hunting Creek.

Landman: Yes, right, settled on that side of the mountain, where we were. And that's how Hunting Creek got its name.

Swent: I guess that's a German name too, maybe. Is it?

Landman: I don't know whether it's German or what. I never did learn the history. Now, they may have it in Lakeport. They have plenty. I noticed down here at the museum they have quite a history on on the Reiff place that I didn't know about. And I never got all of it.

Swent: I'm sure that's all somewhere.

Landman: I have the old deeds and things where my grandfather paid off Reiff in gold coin.

Swent: So let's kind of go through a day of your work at the Reed Mine. You were staying in this squad tent, and you went for breakfast. Where did you go? Over to the bunkhouse?

Landman: Well, no. Where we were staying, Davis Creek separated us from where the cook house was. There was a footbridge where you crossed the creek. Of course, the main drift was--they had to build a bridge over Davis Creek to get across the creek to get to the mill, because it was on the same side as we were.

Swent: So this tram went across the creek?.

Landman: No. See, they come out of the tunnel with the ore and the creek was here and it had a bridge. The drift went into the mountain. They come out of the drift and crossed the bridge and then made a circle and went up to where the mill was up on the hill. And the tram went up the hill, which was quite steep, to the mill, and this is where they would switch from the track coming out of the mine to this tram and hook the ore cars on, pull them up by the cable. And then for the waste, they went on further down and would dump it off the side of the bank, which is a hillside, and that's where they would dump the waste.

Swent: Into the creek?

Landman: Well, no, not into the creek. No, not near the creek. There was a road between there and the creek. No, none of it ever got in the creek. And then my job was--the night crew would bring out the train and leave it, and then we would dump the waste out so they could have the cars empty for the next shift. But they had empty cars so the day shift had their own, and the night shift had a string of cars. So we would dump that. Or I would work on the road, maintaining it and opening culverts.

They hauled their lumber into Berryessa Valley--ten by tens and eight by eights for framing in the mine itself, you know, for timber. And sometimes we would have to help with that, stacking it in certain places.

And then we had to work a telephone line over. We built it because the mine only had one way out. That was through Monticello Telephone Communications. So then they decided they wanted to come out through Lower Lake, so then me and another fellow were put on that line, to rebuild it. We rebuilt the telephone line all the way, as it was before. You see, we had a farmer line that we maintained for Morgan Valley to Lower Lake, and that was our problem, keeping that in order. And then we hooked in in Lower Lake to the office, which isn't there any more, to the company line. And then we had to maintain the farmer line ourselves, so we had to rebuild the whole farmer line because some of the wires were getting old and rusty. So we rebuilt the whole thing. We hooked onto the company line, and I was on that detail for, oh, I don't know, a couple of months, I guess, doing that.

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Landman: Another time, I had an old Dodge for a pickup--a coupe, with a box on the back--and that's what I used to run up and down. We used it on the telephone line, too. I was down by Knoxville. A culvert had got plugged up and was making the road slick. It was

on a hill and they had this truck and trailer with a load of timbers coming in and they wanted to try and dry that road up so he could get in. And I was down there cleaning the culvert and trying to drain the water. I could hear the truck and trailer coming. He was using his air horn because it was kind of narrow turns in those days. So pretty soon, he came and started up the hill, and where he got to where I was, he started to spin out. He had a truck and trailer-load of eight by eights or ten by tens--big stuff. And there he sat!

So I told him, I said, "Well, let's hook this Dodge on there. Maybe I can get you through it." I had a little piece of chain with me, and we tied onto the truck and [chuckling] it was just enough to get him through that slick spot. I looked like an ant pulling a trailer, you know! And that was really something. He got a kick out of it, and so did I. Otherwise, they'd have had to bring something clear down from the mine, another truck or something, you know, to pull him through.

Swent: A little Dodge coupe.

Landman: Yes. [laughter] They had to haul all their stuff in from Sacramento: the oil, furnace oil, and everything else. One time they come in, and this truck and trailer tanker with oil, he had the spin so badly that he wore out all his drivers' tires, so they had to call Sacramento and haul him up a new set of tires to put on the truck. It just wore them. I don't know why they didn't put chains on them.

Swent: Not for snow, but just for the slick.

Landman: It was just slick. It had been a wet winter. A lot of little things like that happened.

Swent: So you were there all through the war.

Landman: Yes, pretty much. I didn't go. I was deferred.

Swent: This was considered essential?

Landman: Yes.

Swent: How did you get your news in those days about the war? There wasn't any television.

Landman: We had radios.

Swent: Radios. Newspaper?

Landman: Well, see, we didn't come to town. During that time, of course, came to town more often, but before that at that time you sometimes maybe would only come in once or twice a month to get supplies. Of course, we had a post office. The Reiff post office was there, and sometimes the one that carried the mail would bring out supplies for the farmers if it wasn't too much. I hauled the mail for a couple of years.

Swent: Oh, did you?

Landman: Yes, in a Model A Ford pickup. Well, I drove for another older fellow that couldn't drive and he had the contract, so I drove for him.

Swent: And you had a post office right there at your ranch?

Landman: No, it was up--it's hard to tell you where it was, now. Before you come to where Reiff turns off of the main road, and then you come back and there's another road turns off there and goes down through a long valley. Further up, you go up this grade. Right on top of the grade, where it drops over is where the post office set. The mine bought that. And then down at the foot of the hill was where the Morgan Valley school was, so that's where the post office was then up to the last.

There was several along the road that wanted a few things, and then we'd pick them up for them. We weren't supposed to haul groceries with the mail, but we did anyway. Greyhound was hauling the mail at that time. Right where the feed store is now in Lower Lake, across where--I think that's where the rest home is--was the post office. And the Greyhound would come in there, and then we would pick up the mail and go out toward Clearlake Oaks and went to Reiff. We'd pick up the mail there and haul it ourselves.

Swent: What sort of clothes did you wear when you worked?

Landman: Well, just what I'm wearing now. Denim.

Swent: Nothing special?

Landman: No, no.

Swent: Boots?

Landman: Just clothes. Well, you wore rubber boots in the winter, that's for sure.

Swent: Any safety equipment at all?

Landman: No, they didn't go in for hard hats at that time, no. [In later years] the miners wore hard hats which also held their miners' lights.

The underground crew--it was so wet underground that they would go in in a full set of rain gear and come out wringing wet. It was just a steady rain, and they worked down in those shafts. It was a miserable place to work. They had to have pumps going all the time to keep the water out, and also, of course, they had to pump air in for the crew to have air. It was a miserable place for underground work.

Swent: How much did they pay the miners? Do you know?

Landman: I don't have any idea. They got more than I did. Well, they deserved it.

Swent: Were there any accidents that you remember?

Landman: Yes. There was one accident. They had an explosion in there. There was gas in there, and they wasn't supposed to smoke, and somebody lit up a match or something and caused an explosion. It burnt one man pretty badly, but he recovered. He was a good friend of ours. But that's the only explosion I know of that they had in there. And, luckily, no accidents. It was pretty accident-free.

Swent: Was there any talk of mercury poisoning?

Landman: Oh, yes. Of course, the ones that worked at the mill, you could get salivated up there, the ones that had worked around the furnace so much. I wouldn't promote this part of it, because there was very little problems that I know of that were salivated. But I knew that could happen, that you could get salivated working around the vapors. But they was pretty clean. They had this stack way up on the hill. I was around it quite a bit, and I never got any problems.

Swent: Did they wear respirators?

Landman: Not that I know of. They may have when they were cleaning out or something like that. I worked at another mine of theirs, the Harrison Mine, and I didn't wear any. Of course, their mine wasn't that pure with mercury.

Doing Top Work at the Harrison Mine, 1940s

Swent: Did you work underground there?

Landman: No, I was all on top--top work--at that time, with a shovel and trucks.

Swent: When was that?

Landman: Well, the Reed was still going. It was about in the forties, along in there. But it wasn't a very high-producing mine.

Swent: Did you ever work at any of the other mines? Oat Hill?

Landman: No, no.

Swent: Red Elephant?

Landman: I hauled a lot of stuff out of there. The people that had the Harrison Mine bought some of the stuff down there and we hauled it out to the Harrison Mine, but that was just incidental.

Swent: From the Red Elephant, you mean.

Landman: Yes. It didn't run long--the Red Elephant didn't, no. I and my neighbor--he had a tractor. We opened the first road into it. Well, it was an old road. We opened it up so they could get in there and then the government went in and we built the whole road. They were hauling gasoline--weren't hauling it clear into the mine, but gasoline was only costing five cents a gallon, delivered in barrels, at that time, yes. Some different now.

Swent: There's a Baker Mine up there, near your ranch.

Landman: No, this is quite a way out from Lower Lake. It's about halfway. It never operated very big. They did work some, but not much to talk about.

The McLaughlin Mine "Spoiled it for Ranching"

Swent: So when the Homestake people came in, were you still ranching out there on the Reiff Ranch?

Landman: Oh, yes. They were all over our place. They were flying with helicopters. There were several outfits, some from Canada and

some from Colorado. They were all flying around with helicopters, staking out claims.

Swent: Of course, you had known Wilder.

Landman: Oh, yes.

Swent: He had the mercury mine.

Landman: He had--what's it called--the One Shot?

Swent: One Shot, yes.

Landman: And they run a furnace, and they had quite a crew working at one time, and then Homestake came in, and that was found out to be real rich. So they were flying all around, different outfits staking out claims, but I don't know if we had anything on the ranch or not. We had quite a bit of quartz showing, but they didn't develop anything else, Homestake didn't.

Swent: But you did have a lot of people looking.

Landman: Well, they weren't looking at our property. We were surrounded by government land out there, and they were just staking out all around us. But nothing was ever developed because Homestake had a good portion of the claims themselves, I guess. I don't know just how much they had of their own.

Swent: How did you feel about all of this?

Landman: Well, it spoiled it for ranching, for one thing. The road went right through our place, the Reiff Road, and of course I got out of the business. I had another ranch leased up at the upper end of the valley, and that was taken over and sold, so I lost that. With that highway coming through the property, it was impossible to raise livestock anymore on account of the fences, stock getting out on the road. So then Homestake came in and bought a good portion of the land that was on the south side of Reiff Road, which is part of the Reiff place. They bought that from a developer that we sold to. We sold to Leisure Properties, originally, which is owned by Robert Dugan. And we sold all but fifty acres.

Swent: You had already sold it then.

Landman: In 1972 we sold 900 acres to Leisure Properties.

Swent: Why did you do that?

Landman: Well, because it wasn't profitable ranching it any more.

Swent: But that was before the mining.

Landman: Yes, it was in '72.

Swent: Before the gold mine, anyway.

Landman: Yes.

Swent: They were planning, I suppose, to develop it?

Landman: Well, they did. They were going to sell it, put cul-de-sacs in and put a bunch of roads in and drill twenty-some-odd wells, but they could never get enough water in each well. See, you had to have at least five gallons a minute, so then they gave that up. We kept fifty acres around the buildings. Then they developed it and sold it to a group for investment purposes. And then they resurveyed it in different acres, and then they have sold now I don't know how many parcels. They're building homes on it now.

Swent: You were still living out there then at that time, were you?

Landman: No. In the meantime, we sold to Wilder. He bought the fifty acres. And then we bought this.

Swent: But when Homestake came in out there, did you still own the ranch out there?

Landman: Yes, we went all through the development process, where they were developing everything, and then at the end Wilder had to leave, so then he bought the fifty acres from us.

Swent: So did you deal with Homestake people at all?

Landman: Their engineers would come around and they prospected on our place. We had them take some samples, and they couldn't find anything in the samples they took on our place, but we became acquainted with them. But they didn't buy anything from us; what they bought, they bought from Leisure Properties. Everything below the mill--from the mill to Reiff Road--they own now. They just didn't want people coming in behind them.

Swent: Did you go to any of those town meetings that they had?

Landman: Not particularly. There's nothing we could do about what they're doing. I have some articles that was printed in the Sacramento Bee. The Sacramento Bee come around and interviewed us, what they thought about it. Of course, we didn't think to like it

[chuckling], you know. It just spoiled it for the ranchers. Anyone close to it. The others further back in, it didn't bother them because they're far enough off the road to where it wouldn't interfere with them.

It improved the road, that's one thing. And where it used to take three-quarters of an hour to come to Lower Lake, now it only takes about fifteen minutes. I worked for the road department in Lake County for two years and I had to go back and forth from the ranch then every day, so I would drive in and jump in the truck and drive all day, and then [chuckling] drive home. It was quite a rat race at that time.

So then Barbara was working at the hospital. She was working for years for a doctor. Then she went to work at Redbud [Hospital] and, oh, I don't know. It was either '80 or somewheres along there. She worked emergency ward 'til--how long ago has it been now? Time goes by so fast. 'Til she retired, anyway. So she's been a nurse for about thirty-five years.

Swent: When you were married you were still living over on the Reiff property?

Landman: Yes. We bought another home in Clearlake and she stayed there for a while, but it was so much going back and forth--we were trying to keep two places going. We didn't sell that one out there 'til we bought this one. Then it was so far between the two that we decided to buy something else, closer in, so we bought this when we sold the rest of that out there.

Swent: And who did you sell that to?

Landman: Wilder.

Swent: I see. He bought your--

Landman: The fifty acres.

Swent: Just the fifty acres. But it was more than that.

Landman: Well, we'd sold the 900 to Leisure Properties before that.

Swent: I see, I see. I see, okay.

Landman: And all we kept was the fifty where the barns and part of the field land was. It wasn't enough to raise livestock.

Earlier Problems with Illegal Deer Hunting

Swent: So from your point of view, the gold mine was just a nuisance?

Landman: Well, we had problems before. Before it was hunters all the time, spotlighters and things like that--it was getting worse and worse--that were shooting around. They were opening roads in behind us, and they would go in behind and hunt. And you'd run into some pretty rough characters sometimes back in the hills. You wanted to be sure of having some kind of protection.

Swent: Did you carry a gun?

Landman: Oh, yes, always. Even at night I packed a gun sometimes, but never got into a shooting scrape.

Swent: These were people that were poaching your cattle?

Landman: No, just poaching deer.

Swent: Deer. Did you ever have your cattle stolen?

Landman: Luckily, we never had any shot because we had them in close during the hunting season. And at nights, of course, they were back in the back range and they couldn't get near them, you know. We never lost any cattle from hunters, but they would shoot all around at night. I caught some in an orchard we had out there, spotlighting. They had a box in the back of a pickup lined with butcher paper. They were hunting for market.

Swent: But hunting deer.

Landman: Yes.

Swent: Somebody said that some of the ranchers had trouble with people coming up and killing their cattle.

Landman: Well, they would do that down along Berryessa Valley. On Knoxville Road, they had a lot of problems coming in there shooting cattle.

Swent: But you didn't.

Landman: We didn't lose any because they weren't close to the road at that time. But Gambles lost cattle, and down at the Friyer Ranch, they lost cattle because there was a long stretch of road there between Berryessa and Knoxville that was pretty desolate, and the

Gambles had their cattle right along the road. So finally they had to put patrols on the road to protect their stock.

Swent: Did you have marijuana growers up here?

Landman: No, never heard of such a thing in those days. That came on later. Now they're picking them up everyplace.

Swent: But they weren't on your property.

Landman: No.

Swent: That wasn't a problem?

Landman: No, we never had a problem there. It seems they had to get someplace where they have water.

Swent: That's true. What about hiring help? Did you hire helpers?

Landman: At times I did. Hauling hay, I had to have help. When I had the other ranch, we raised quite a bit of hay and sold the hay, the upper ranch, and so we had to have help. It was just my brother and I would handle the hay, mostly.

Swent: Is your brother still here?

Landman: Yes, he's here, yes.

Swent: Did the gold mine bring in more people?

Landman: Well, they didn't provide any residences. That's one thing they didn't want is people building residences out there for them. At first, they run buses. I don't know how many times a day, whether they run any at night, but for the different shifts they had their own fleet of buses. They must have had eight or ten buses that they were running back and forth. They wanted them riding buses so they wouldn't have so much traffic on the road, you know, because I don't know how many they had working. They must have had a couple of hundred people working at one time between the mill and the mine.

Then later, I don't know why, they cut the buses out. Cut them down to maybe one. I don't think the last year or so they were running any buses. It's all individuals going back and forth. Sometimes, like at quitting time, be a steady stream of cars. So now, since they shut the mine down, I think they laid off around 100 people. I'm not certain about the number, but all they're doing now is with the stockpiles they've got down there at the mine--it was lower-grade ore, they're just running that

now. And all they need is people to make a slurry down there and pump it up to the mill, so that's all they have now working. The mine itself is pretty well finished.

Swent: So maybe it will be better for the ranchers again.

Landman: Well, somehow they're supposed to turn it over to the University at Davis, I heard.

Swent: Yes, that's the plan.

Landman: Now, what they're going to do with it, I don't know. Have you ever been down to the mine itself?

Swent: Oh, yes.

Landman: Well, they've got all those buildings. I don't know what the university plans on doing.

Waste Disposal, Reclamation, and Other Environmental Concerns

Swent: A research station, I think, of some sort.

Landman: Well, where the mill is there's a lot of cropland and they figure they're going to drain that. They're going to have to drain that lake and put it back to its original condition. Now, whether the cyanide has settled into the soil itself, who knows? Maybe it developed some leaks. I don't know what they're going to do about it. I don't know if you've noticed this pile of dirt on this side of Lower Lake. There was a service station there, and they made them dig all that dirt out of that hole, and it's laying there piled up. It was covered, and now it's in the open. But when the highway comes through, they're going to just re-oil that road and put oil right back on the ground again. I don't imagine that that service station has put too much toxic waste into the ground, because they're going to turn around and put it all right back on top of the ground again when they resurface it. So what they're going to do with that dirt, I don't know. I don't know if you noticed the two mountains of dirt on this end?

Swent: No, I hadn't noticed that. I will when I go by.

Landman: It's across from the Shell station. There was a Union Oil station there for years.

Swent: They're pretty careful now about anything that might be dangerous.

Landman: Yes, but how dangerous is it? Where are they going to dump it? They're going to dump it someplace else, and it's leaching out now because the plastic is all blown off of it. So I think a lot of money was wasted there, and I think in other places.

Swent: As I understand it, Homestake has to restore everything pretty much the way it was before.

Landman: Right. Now, I don't know what they're going to do with the big pit, whether they're going to fill it up or what.

Swent: I think not. I don't think that there's a way to fill that completely.

Landman: Well, they'd have to haul all the dirt back across the road. See, they hauled it across the road over there.

Swent: And they planted grass and trees and things on that.

Landman: Yes.

Swent: And I don't know about the tailings pond.

Landman: I don't know what they're going to do with that water.

Swent: Maybe just let it dry up. I don't know.

Landman: Well, I don't know. If it has had cyanide in it, I don't see how they can do that.

Swent: My understanding is that cyanide degrades rather quickly.

Landman: Oh, is that right?

Swent: I think it does.

Landman: I don't know. I know they were supposed to test all our wells periodically to see if any of it was leaching into the groundwater for the wells. Now, I don't know if they kept the tests up or not on the wells around that area, whether it was leaching into the ground or not. I don't know. They save streams in some places; in others, they don't do anything. You wonder about it sometimes.

Swent: That's right.

Landman: I know this fellow that's on KGO. He was a professor at the university. I can't remember--Bill, Bill, Bill. He's on KGO on Saturday nights. He takes over the talk show. And he is really down on environmentalists because he was in the NASA program, and he taught at the University of California, too. I don't know just what he taught, whether it was in the sciences or what, but you should listen to him on Saturday night. He comes on about eleven o'clock. Bill Wittenberg, I think it is. He speaks right out against them. Well, he calls them nuts, the crazies. And he's well-educated. So the things that they go through, like the trees up toward Tahoe that the beetles have got into, they won't allow them in there to cut them down while they're still usable for lumber, so then they deteriorate to where they're no good for anything. I know he doesn't care for them.

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Landman: So several moved into the Reed Mine after that--individuals--but it never did develop into anything. They might have run it a little bit in the furnace end of it, but most of them didn't. When Bradleys left, that was practically the end of it.

Swent: Well, I think the market for mercury pretty well ended, too.

Landman: Yes, that's right. I don't think it's over three hundred dollars a flask now. I think it's quoted around there. But you can't make it on low-grade ore, see, undergrounding was so expensive. Now, in Sulphur Bank it was open pit, see? They had shovels, and it was all open pit out there, which is much cheaper to operate than underground mining.

Swent: Was there organized opposition to the mine?

Landman: Union-wise, you mean?

Swent: Well, I meant by the community. Were there any groups in the community? Were there any objections?

Landman: No, they were for it because it did employ a lot of people. It helped the area quite a bit. It was the biggest employer in the county there, I guess, and Homestake did a lot of volunteer contributions to the county, to the schools and--

Swent: You mentioned Redbud. I think they helped the hospital.

Landman: Yes, they helped a lot of things. They're very good people.

Swent: Just didn't help the ranching.

Landman: Well, [chuckling] the smaller ranchers was on the way out anyway.

The Difficulty of Operating a Small Ranch Today

Swent: You think so?

Landman: Yes, yes. Well, all ranching. You've got to be big or nothing; there's no in between. And then, if you're big, you have to employ help, and that isn't too great any more because you have to contribute so much to the help that you have. Even if you have one person working, you have to keep such records and unemployment insurance and everything else so that if you don't have the income to keep up with it--I mean, you need bookkeeping and everything else.

Swent: It takes a lot of time.

Landman: Right. And also, when you get help in to help, like with the walnuts, they're getting the price up so high now, according to the price of the walnuts, that it's marginal whether you're gaining because they put so much waste in the sacks and charge you so much a sack. By the time you put it through the dehydrator, you might come out with 50 percent of the walnuts because they put everything in the sack.

Swent: The pickers do.

Landman: Yes. Some of them are fairly good, but, see, the price they're charging now and the price of walnuts, why, it's still marginal.

Swent: Where do you get your pickers from?

Landman: Well, they come around. Some of them have contractors that have their crews, and then some are individuals. There would be a family group come around or something like that. And you have to carry insurance because if one gets hurt you've got to be covered. We have this small place. It's not a paying proposition, but we got to maintain it.

Swent: How many walnuts do you have?

Landman: Well, there's only about four acres, but I have to have enough equipment to take care of twenty acres or more. You have to have the machinery. But I retired and never want to get into that. It's a problem now keeping this equipment going without having to

hire mechanics. I try to do all I can myself. And I'm eighty-one and I can't crawl around under this stuff like I used to.

Swent: Do they harvest by hand or by machine?

Landman: We bought a machine, but it don't work on this place because the ground isn't level, so it's setting around deteriorating. We have to harvest by hand, have the pickers come in. And then we have the shaker come in and shake them. Then I spray them. We spray them. We have to spray about three or four times during the season on account of the husk fly. I try to blow them by hand. You have to blow the leaves off so they can find the walnuts, but last year we hired a blower to come in and blow the leaves. It's just too much.

Swent: Well, the next time I eat walnuts, I'll appreciate it! They're awfully good.

Landman: Well, we've got them. I've got some in the freezer. Been in there a couple of years. We hardly use them! Our dog, she eats more than we do. She just goes around and picks them up and cracks them and eats them.

Swent: Your dog does.

Landman: Yes. You ought to see her. [laughs]

Swent: I didn't know that a dog would eat walnuts.

Landman: Oh, she's something else. I'll tell you, this dog is pretty human. Golly, yes.

Swent: So you've gone through ranching, working at mines, and now you're a walnut farmer.

Landman: [laughs] Yes. Can't get away from it. Well, we had most of the equipment out from out there, the tractors and things. We had them; we just hauled them in here. But fuel was getting so expensive. Now gasoline is getting prohibitive, too.

Swent: We talked about five cents a gallon out there at the mine.

Landman: Well, that was a government deal at that time. The government was developing those mines because they needed the quicksilver during the war, and that's what they were paying for it. I don't remember. I think we were paying about fifteen cents a gallon at that time that we bought. I bought from Union Oil at that time. I guess I'm one of their oldest customers. We bought it--oh, in the thirties we started buying from Union Oil in Lower Lake.

Swent: Did you buy it in bulk?

Landman: Yes, in barrels.

Swent: This is ordinary automobile gasoline?

Landman: Yes, and our diesel. We had one tractor that run on diesel. But I buy it now by the barrel for here, the low grade. The pickup, it won't handle the low grade, so I buy it from the station.

Swent: Did you ever need to buy propane or butane, any of those things?

Landman: Yes. We had propane out at the ranch because we had a refrigerator that run on propane. And then we had the gas stove and gas water heater and things like that in later years. And now they have electricity in the old house and [chuckling] the company telephone that they run out there. I don't remember whether it's electricity or telephone. They wanted sixty thousand from us, the ranchers, to put in the telephone, and that was just on the main road. And electricity was out of the question. You had to put in so much stuff, and there were so many ranches that were off of the main road that they had to run into that. It was prohibitive to do it, but when Homestake moved out there, of course, that opened it up because they needed it. They had to have it and used so much.

Now, when they close, of course, all the ranches have electricity now and telephone, so they will probably still supply it, because if [the University of California at] Davis takes it over, they'll need it then, too. But I don't know what Davis is going to do with all that cropland; it's not like down in the valley. It's prohibitive to grow some things out there because the weather is prohibitive of certain crops.

Swent: Pretty high altitude, isn't it?

Landman: Yes. It's all right for grain crops or things like that--dry-land crops--but you don't have irrigation. Of course, now they've got the lake down there. That will make a difference. They can irrigate with that. So it remains to be seen what they're going to do. Being it's state money, they can do things that the average person can't.

Swent: Yes. Well, it will be interesting to see. I think the mine is planning to be there for another eight or so years.

Landman: I guess so. It all depends how long it takes them to run that ore through, I guess. I don't know. I was talking to somebody the other day and he said he had 'til October to leave. Now, I

don't know if he was working in the mill. He must have been working in the mill, I guess. See, they're changing their system of milling it now. They don't need as high-tech stuff, I guess, for this lower-grade ore, maybe. I don't know. Because I know they were hauling ore in from some of the older gold mines, I think--low-grade ore--running it through their ore there for a long time. So that's about the story of it.

The Lower Lake Action Club Successfully Opposed a Power Line

Swent: Well, that's very interesting. Do people around here talk a good deal about these sorts of things? Where do they meet each other to talk about these things?

Landman: Well, we have what they call the Action Club in Lower Lake. And I don't know, we kind of dropped out of it but I think they have a meeting once a month.

Swent: How is that organized?

Landman: It's a volunteer thing, and they do take donations from the members. I know we belonged to it quite strongly when SMUD wanted to put--see, we have one power line going through us now. PG&E had it in when we bought the place, and SMUD wanted to put a parallel line through for themselves for the state.

Swent: What is SMUD?

Landman: Sacramento Municipal Utility District. So we had them all join. Cobb Mountain had a group, and our Action Club had a group, and then when you got down to the valley, Williams had a group, Colusa had a group--all through the Sacramento Valley. It was going to down through Arbuckle and that area, through all that farmland, to--I can't remember the name of the station now down there. I think it went as far as the airport or past it, and a couple of counties down south were getting power off of it.

So we had to join up and we had meetings in Sacramento with the, oh, what was their title? Something to do with either the water or power. And fought it with them. And then we went to meetings in Colusa, all the farmers. Each group from each area went, giving their reasons for not wanting it. It would have destroyed us because we have forty acres up here that just go along the edge of it, and if they had came down further, they'd have had to--see, PG&E has about a hundred and fifty-foot right-of-way. If they'd have come down with another one that would

have destroyed that forty acres for us, we wouldn't have been able to sell it.

So anyway, they had several routes. You ought to see the stacks. We've got stacks of literature from SMUD. Cost them millions of dollars. They sent it to everybody with different maps and different routes. It was supposed to come down and then cross through Lower Lake and go out to Highway 20, paralleling PG&E's line. And, see, they were buying power off of PG&E, and PG&E needed it all themselves. So I think PG&E was the main one that defeated it.

Finally, SMUD decided they would come out through by Hidden Valley and go out east of Lower Lake, maybe out as far as Morgan Valley, and then head over through from the Reed Mine into Capay Valley with the line. They had several routes. And between the ranchers in Sacramento Valley and PG&E and everybody else, they decided to give it up. And then I don't know whether they were bringing their power in from Washington or where they're getting their excess power. They have lines coming down from that way. And so finally it was defeated, and they got the end of it. But I can show you volumes of stuff--papers.

Swent: But this was your Action Club that really got together.

Landman: Right. Well, then, finally Clearlake got into it; even the supervisors didn't help us.

Swent: The town, you mean.

Landman: Yes. They found out it was going to hurt them. They didn't care before that. Then, because they thought it was going east to Clearlake, out where the dump is, finally they joined in. Anyway, it was defeated to our advantage, anyway. So we bought a big flatcar to put across the creek. It was one of those that haul those trailers. You know the piggy-back trailers on, the eighty-five-foot long? And we sold that. We sold the property and then the people that bought the property put it in. So we got out of that all right, but it was quite a worry, keeping you awake at night, wondering whether it was going to destroy us or what. Because you have no recourse. I talked to one of the supervisors from here, this area, and he says, "I've got power lines going over my head." He wouldn't even give me any satisfaction, to help us. They can do whatever they want, you know?

And then they were talking about that magnetism or whatever it is that's dangerous. Well, I've heard more about that. It was destroying the milk in Sweden or someplace, the cows. Was

making it radioactive or dangerous to drink. So they had that going. And they advised us not to fill a gasoline tractor or anything anywheres under them because it would explode. And I walked around under it quite a bit up there when we were surveying, so when I talked to fellows that had been working around it, PG&E people, they didn't seem to have any ill effects.

And now I hear that they have some kind of restraints around these power lines that reduce this. Even the televisions give it off. That's why they don't advise children to get any closer than eight feet from the screen. But it's not supposed to be as dangerous as they say. Well, I don't know, really, how bad it is. But you worry about it anyway. Especially, you know, you've got to reveal this to anybody that you sell to. We still have twenty-six acres that it goes through, and we're not sure whether it's dangerous for people or not, to warn them that it is, so you figure you aren't going to sell it.

We were hoping the [steam] wells would dry up. Well, they are, but they've got this pipeline going up there. They're going to inject this sewage into the wells and try to bring them back. They're going to build a pipeline from Clearlake to Middletown, and then it goes up to the steam wells, and they're going to inject this wastewater down into the wells and create more steam.

Swent: The Geysers there?

Landman: Yes. They're supposed to start that project pretty soon. So we'll see. I don't know how long it's going to prolong it. They seem to think it's going to do the job, but I don't know. They fool around with Mother Earth very much longer and they are going to have problems.

Opposition to a Putting in a Prison

Swent: Yes. So what's your Action Club acting on now?

Landman: Well, we were against this prison. We had the meeting at the Brick Hall, and I talked up against it. Everybody that was there pretty much talked against it. But the ones who were running for supervisor now, they're all for it. And the real estate people are all for it. Of course, they can sell more property, they figure. I don't know how. But they thought it was going to improve the value or the income for this end of the county. See, nobody else wants it. They want it all down at this end of the county. They don't want it at the upper end, so they're pushing

it all down here. And we have a lot of the parolees running around here now. They're picking them up all the time. They just go right back to what they were doing. And that's what I told them. We have enough already without bringing in any more.

Then we have a camp right up here, between here and Kelseyville. Once in a while, they get out. They're not too dangerous. They're trustees, more or less. They had one get out of Lakeport. He broke out of jail, but they caught him up there in Nice yesterday. But we were afraid that it would bring in more people that--I don't know what the proper word is. If they had relatives in here, in the prison, they would be moving up to get closer to them. And so we was afraid that it would deteriorate the neighborhood, the area, more than help it, and it would derive--

See, this area is mostly retirees, and the older people. And it's getting bad enough up here now for the older people with the bad people that's running around. It isn't only here that we have bad people, but they're everyplace, even in the city. So then that will steer people away from up here. Like I heard in one talk show. This woman called in. They call in and talk to this Art Bell. And she's from Kansas. I think it was Kansas, where Leavenworth is. They call that now the Prison State. They want to build two more prisons there. And we were afraid that people in the city would say, "Well, you're going up to the Prison County?" It's bad advertising. So that's why so many of us--it was defeated by a close margin.

Swent: What about the gambling? How do you feel about that?

Landman: Well, I think the state is foolish for not having it. That's why Nevada doesn't have near the taxes and things that we have. The gambling is paying the bill. Now, they say more people are moving out of California than are moving in; and some are going to Oregon, and some are going to Nevada, because it's cheaper. Las Vegas is the fastest-growing area in the country now, they say. I think it's the worst thing in the world to have brought a prison in here. We're trying to clean the area up now, and they're trying to destroy a lot of the old houses and get rid of this poor element as much as possible.

Swent: But the gambling doesn't bother you.

Landman: The gambling doesn't bother me. I don't think so. If they go all the way, like Nevada. So many people are going out of California to Nevada to gamble. We don't gamble, but--just on the walnut crop. [laughter]

Swent: Middletown has a casino.

Landman: I don't know how much of a cut the local area gets out of these Indian casinos. I guess they get quite a bit of tax money. I don't know.

Swent: I don't know, either.

Landman: But I do know, I heard the other day that a local man--he had a tire shop in Clearlake; he sold that, and he sold his house and another house his father owned, and they moved to Oregon because I guess it's much cheaper to live there than here. Or in Nevada. So I don't know. I know it's getting pretty expensive here.

Swent: Did the coming of the mine make any difference in the cost of living here, do you think?

Landman: It helped them because they had a steady job. I don't know if they have any retirement benefits. They tried to get the people jobs elsewhere.

Swent: Well, I think, John, maybe we've just about wound it up. Unless --is there more that you'd like to say before we stop?

Landman: No, unless I'm getting myself in trouble. I better stop while I'm ahead.

Swent: This has been a good session; this has been really interesting.

Landman: It has.

Swent: Now, it wasn't so bad, was it?

Landman: No, [chuckling] I guess not.

Swent: Shall I turn it off?

Landman: I think so. The mine is over with, and the Homestake is the end of it, so far.

Swent: Okay, well, that's all. I'll turn it off.

Transcriber: Mim Eisenberg
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Berkeley, California

Western Mining in the Twentieth Century Series
Knoxville/McLaughlin Project

Roberta Lyons

JOURNALIST AND ENVIRONMENTALIST

An Interview Conducted by
Eleanor Swent
in 1997

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Since 1954 the Regional Oral History Office has been interviewing leading participants in or well-placed witnesses to major events in the development of Northern California, the West, and the Nation. Oral history is a method of collecting historical information through tape-recorded interviews between a narrator with firsthand knowledge of historically significant events and a well-informed interviewer, with the goal of preserving substantive additions to the historical record. The tape recording is transcribed, lightly edited for continuity and clarity, and reviewed by the interviewee. The corrected manuscript is indexed, bound with photographs and illustrative materials, and placed in The Bancroft Library at the University of California, Berkeley, and in other research collections for scholarly use. Because it is primary material, oral history is not intended to present the final, verified, or complete narrative of events. It is a spoken account, offered by the interviewee in response to questioning, and as such it is reflective, partisan, deeply involved, and irreplaceable.

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It is recommended that this oral history be cited as follows:

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Copy no. _____

Roberta Lyons with husband and child, 1996.

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INTERVIEW HISTORY--Roberta Lyons

Roberta Hanchett Lyons is a Clear Lake "Rimlander" who lives in the house she grew up in, on Cliff Drive high overlooking Jago Bay. She was invited in February 1997 to participate in the project and the interview took place at her home on 26 March 1997; it gives a candid and sometimes poignant view of social upheavals reflected in her life and community. On the day of the interview, daffodils and redbud were in bloom, and from the living room where we sat there was a beautiful view of cliff, bay, and lake.

Roberta, born in 1956, was part of the generation which made the Cobb Mountain area a haven for gurus of hippies and flower children. She tells of teen-age experiments with varying lifestyles, early marriage and divorce, extended periods of "total vacation" in a Colombian village, and living in a cabin in "pristine" Morgan Valley before settling down as a college teacher's wife and a mother. She takes pleasure in the fact that she moved to this house when she was five, and she and her husband took it over in turn when their daughter was five. She expresses fear for her child growing up with the violence and lawlessness that she sees around her now.

Bonny and John Hanchett, Roberta's parents, owned and edited the Clear Lake Observer and all of their children were involved in its production. Roberta was a reporter for the newspaper during the years of discovery and development of the McLaughlin Mine. She is still an active journalist and also an environmentalist who heads the local Audubon Society and has established a land trust.

She looks back to the time when the mine first began and she was just getting ready to leave Morgan Valley Road, and says,

> My life was going in another direction anyway, and so I just kind of accepted it and said, "Aw, it's too bad." And I didn't want to go out there for a long time. I didn't want to look at it. I didn't want to see what was going on. ....Morgan Valley would be changed forever. But there are a lot of nice people out there....And they were quite happy to have the paved road....[and] those amenities....I guess I could be naive, but they [Homestake] seem like a really good company, and...Jack Thompson [Homestake's resident manager]... was just not...whatever you get in your mind as a miner.

She admits that her opinion of mining is shaped by a song from the 1960s called "Meuhlenberg County," and she uses the coal-mining term "strip mine" for the McLaughlin pit. While not much interested in

factual or technical details about it, she is concerned about how the gold mine affects the countryside which she loves.

This interview was followed on the same day by a complementary one with Roberta's mother Bonny Jean Hanchett, which appears in Volume 4 of the Knoxville/McLaughlin project. Together, mother and daughter give a thoughtful picture of a changing community.

The tapes of the interview were transcribed in the Regional Oral History Office, lightly edited, and sent to Roberta Lyons in June 1997 for review. She reviewed the transcript carefully, making a small number of changes to correct and/or clarify details, and returning it promptly. The manuscript was corrected and indexed at our office. The tapes are deposited in The Bancroft Library and are available for study.

The Roberta Lyons interview is one of more than forty interviews which were conducted by the Regional Oral History Office from 1993-1997 in order to document the development of the McLaughlin gold mine in the Knoxville District of Lake, Napa, and Yolo Counties, California, from 1978-1997, as part of the ongoing oral history series devoted to Western Mining in the Twentieth Century. The Regional Oral History Office was established in 1954 to record the lives of persons who have contributed significantly to the history of California and the West. The office is a division of The Bancroft Library and is under the direction of Willa K. Baum.

Eleanor Swent
Project Director, Research Interviewer/Editor

Regional Oral History Office
The Bancroft Library
University of California, Berkeley
February 1999

Regional Oral History Office
Room 486 The Bancroft Library

University of California
Berkeley, California 94720

BIOGRAPHICAL INFORMATION

(Please write clearly. Use black ink.)

Your full name Roberta Lee Lyons

Date of birth 4/27/51 Birthplace Everett, Wash.

Father's full name Ross Allen Hanchett

Occupation Journalist Birthplace Montana

Mother's full name Bonny Jean Hanchett

Occupation Journalist Birthplace Michigan

Your spouse Harold William Lyons

Occupation Professor of Biology Birthplace Brooklyn, N.Y.

Your children Kate Alexandra Lyons

Where did you grow up? Lake County

Present community "

Education BA — Sonoma State

Occupation(s) Journalist

Areas of expertise — Small newspapers —

Other interests or activities Local environmental activism; historical preservation

Organizations in which you are active Redbud Audubon Society, Lake County Land Trust; Lower Lake Historical School Preservation Committee; Lake County Marketing Advisory Committee; Lake County Resource Management

INTERVIEW WITH ROBERTA LYONS

THE CLEARLAKE COMMUNITY, 1956 TO 1997

[Interview 1: March 26, 1997] ##[1]

Childhood in Lower Lake in the 1960s

Swent: It's a beautiful morning, the redbud is blooming and your daffodils are blooming, and it's just an absolutely gorgeous moment here on a cliff up above Clear Lake. Roberta, let's have you tell when you were born and where you grew up. Let's have a little bit about growing up.

Lyons: Okay. I was born in Everett, Washington. My family bought a little weekly paper in Woodland, Washington, I think when I was about two and a half or three. We went down to Woodland. And then, when I was five, we moved to Lower Lake. Let me know if I'm giving too much detail.

Swent: You virtually can't give too much detail, [chuckling] so don't worry about that.

Lyons: So I was born in 1951.

Swent: Why were your parents in Everett, Washington?

Lyons: They grew up in that area. My mom grew up in Everett; my dad was from Washington.

Swent: Well, I'll be talking to your mother again.

Lyons: They had both graduated from Washington State. She'll probably tell you about all that. So they were newspaper people. They bought the Clearlake Observer, and we lived in Lower Lake in a little house on Lower Lake first, and then they bought this place

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[1]## This symbol indicates that a tape or tape segment has begun or ended. A guide to the tapes follows the transcript.

in May of 1956, when I was five years old. I thought it was kind of interesting that we bought this house from my parents when my daughter was five years old. That was kind of neat.

So I grew up out here in Jago Bay on the lake. I think that's probably what gave me my appreciation of nature. I loved the lake and playing on the rocks on the shore. We had a pretty nice childhood, although my parents worked very hard, very long hours, so they didn't get a chance to enjoy too much of it [chuckling] with us.

Swent: How did you go to school? Was there a bus?

Lyons: We took the bus. We didn't have to leave quite so early so we would walk down to the bus and go to school at Lower Lake Elementary School. We usually rode the bus home, or sometimes we'd get off at--at that time the Observer was located in Lower Lake and we would sometimes go down to the office and hang around and pester my mom until my grandfather would take us home. My grandfather lived with us for many years.

We had horses, and that's probably how I first became familiar with Morgan Valley. I had a friend, Sybil Day. When we got a little bit older--we were probably nine or ten--we used to keep our horses at her place, which is on Bonham Road, off Morgan Valley Road. And we would ride out there. We would ride out Morgan Valley Road, but we didn't go all the way out to actually Morgan Valley. That was pretty far. But I remember going out there with people. I had some friends who ranch out there, and their parents would drive us out there.

Swent: What was their name?

Lyons: Staehles. Phil and Betsy Staehle. They lived at the beginning of Morgan Valley Road in later years.

I remember one time, too, going out with Sybil's mom to collect rocks for her fireplace. I'm not sure exactly where that was. It might have been near the One Shot Mine because they'd gotten permission to go out, and it was very pretty rock, and we went out. They got all the kids together [laughing] and took us out in a pickup truck. We loaded these rocks onto the truck for the fireplace.

Okay, so, do you want more detail about school? Or just kind of keep rambling?

Swent: Well, what do you remember particularly about it? Was it still in the old schoolhouse?

Lyons: At Lower Lake Elementary? Yes, at that time, there was just the older building.

Swent: The one that's now the museum.

Lyons: No, no. That was the really old school. No, the Lower Lake Elementary that I went to school--I think it was built in the thirties. And the old building is still there; it's used as the teachers' lounge sort of. But that was the only building at the time that I went there. It was neat. There were very small classes. It used to be, say, first, second, and third; and there would be maybe fifteen kids in all three classes. We had one teacher. Our teacher was Mrs. Ross.

Swent: What was her first name?

Lyons: Victoria Ross. She had grey hair that she wore back in a bun. She was kind of a large lady but not--she would take us on field trips to the cemetery, which was kind of--

Swent: It was right there by the school, isn't it?

Lyons: I tell people that now, and they think it's morbid or something.

Swent: Oh, it's a beautiful cemetery.

Lyons: And we loved it! I know my daughter likes to go to cemeteries. It's fascinating to look at the old tombstones. She would talk about some of the tombstones that were of children. I think it was not so much to scare us but maybe to point out that in the old days children died of things you guys don't have to worry about.

It was fun going to school there. There was a beautiful lawn in front of the old school. The big oak tree. And that's where we played. I was dismayed, I think it was probably in the seventies they cut down the oak tree, paved the lawn, and built new classrooms where the lawn was. At the time, I didn't realize what was going on. I don't think I was around, but I always was dismayed that they did that.

We were really into horses. We used to play horses. We pretended like we were horses. We ran around the lawn being horses. That was part of our experience in Morgan Valley was riding out there.

Swent: Did you ride almost every day?

Lyons: On the weekends.

Swent: Somebody else took care of the horses during the week.

Lyons: It would depend on where they were. Sometimes we kept them out here, and then other times other people would feed them. When we had them at Sybil's, her dad would feed them. It was, like, my dad would feed them when they were out here. Much to his dismay. I'm sure.

Swent: Where did you go to high school? Was there junior high school?

Lyons: No. It was one through eight, and then we went to the Lower Lake High School. And I was a senior in 1968. I guess '67 was the Summer of Love. So that was kind of an exciting, different time.

Swent: Tell a little bit about when you were in high school how aware you were of what was going on.

Lyons: Well, I think we started becoming aware of it in '66. I was a sophomore and a junior in '66, '67. But we were pretty isolated up here. We would go out and drink a little beer at parties, but we weren't too wild. It just wasn't really the approved thing to do. I think we were just pretty average teenagers. And then these girls moved up from San Jose with marijuana, [chuckling] and they started turning a few kids on to marijuana.

Swent: Who were they?

Lyons: I think they moved up from Campbell. I think their dad wanted to get them out of the city! But they were kind of famous among a lot of us.

Swent: They came into your school.

Lyons: Yes, yes. And then they started sort of turning people on to marijuana, and that's the first time I tried it, in 1968. That was kind of funny.

Swent: And where were you doing this?

Lyons: I guess at parties, occasionally.

Swent: At homes?

Lyons: Yes. All through high school, among my circle of friends it didn't really--it was something we would try once in a while, and I remember--my mom's not going to read this, is she? [laughing] I remember stealing my grandfather's cigarette rolling papers and rolling one up and smoking it.

Swent: At home?

Lyons: Yes, I think I did it in my bedroom and put a towel under my door. But I didn't really, you know, do that.

Swent: Where did you get the marijuana?

Lyons: I think we got it from these girls. Or a friend of mine got it from them. As I say, at the time it was just not really that well-established up here, so it wasn't like--but there were starting to be a few hippy kids in our class by 1968, by the time we were seniors, and a few rebellious people. I was young when I graduated. I graduated at seventeen because I had skipped a grade, so then I went to Santa Rosa. And that's when I <u>really</u> started meeting some--that's where it was really happening at that time in 1968, '69.

Swent: Did you live at home and commute?

Lyons: No, I moved to a dorm. And the first year I lived with these girls from Kelseyville, from farming families. We didn't hit it off too well because they thought I was pretty wild, and I thought they were really square, so we were just [making a sharp clicking sound].

Swent: This is Santa Rosa Junior College.

Lyons: Yes, Santa Rosa Junior College, yes.

Swent: What were you studying?

Lyons: [chuckling] Oh, I was just taking general ed. That's a good question! I was getting C's. I was really just having a good time.

Swent: Had you been a good student in high school?

Lyons: Average, I would say. I was very good in English and history and those type of subjects, but I was not too good in math.

Swent: What did you do for school extra activities? Did you have a school newspaper?

Lyons: No. I was a pompom girl for a couple of years, but by the time I was a senior I didn't like doing that anymore. I just kind of wanted to go my own way.

Swent: Then at Santa Rosa you were just taking general--

Lyons: Yes, just general ed. And in my second year at Santa Rosa I met these totally opposite girls from the first girls I lived with, and they were totally crazy--you know, way to the extreme the other way as far as drugs and that sort of thing.

Swent: By now it's 1970?

Lyons: No, it's 1969. That was just the second semester that I was at Santa Rosa J.C. So that was kind of an eye-opener, too, because they were a little beyond where I was [chuckling] at the time. They started hitchhiking into Haight-Ashbury. That was the thing to do then, was to go to San Francisco. As I was telling you, then I came home for the summer--that was the time everybody was interested in Eastern religion and meditation and Edgar Cayce and whatever, spiritual, you know.

So I came home, and one of my brother's friends had been at Berkeley, and he had gotten into meditation. He was a follower of this guy named Master Subramunya, who lived and had an ashram at Bonanza Springs. It was an old hot springs resort on Seigler Mountain. But, you know, Lake County was famous for its hot springs resorts on the mountain: Seigler Springs and Howard Hot Springs and Harbin Springs. A lot of different--Bonanza Springs was an old one that was a smaller one up by Seigler Springs, and Master Subramunya lived there with his followers. Anyway, I fell in love with--I don't know. Should I say his name?

Swent: If you want to, that's fine. Sure.

Lyons: [laughing] I guess it's okay. Ed Robey. Ed Robey, Jr.. He's our county supervisor now. We're quite good friends.

Swent: He was also at this ashram?

Lyons: Yes. He lived there. And he was into meditation, so I thought that was really cool. And he was a friend of my brother's, and we met at a couple of parties during the summer, and I was just infatuated with him because I thought that was a neat thing; he was like this spiritual guy. So we got married!

Swent: It's a little hard to go back and realize what a powerful force that was at the time, wasn't it, among young people?

Lyons: Yes, I think it was. It was important.

Swent: Seeking for something. The war. Were you involved in peace things also? Anti-war?

Lyons: Not really. There wasn't a whole lot of that. I remember in Santa Rosa going to see Michael Harris, Joan Baez's husband, before he went to jail. We went to some sort of rally. Poor Michael Harris, going to jail!

Swent: Were there boys from your high school class who were going off into the army or were going to Canada to avoid it?

Lyons: I don't remember. I know there were some who were--I wasn't that close to the boys in my class to really keep track of what they were doing, to be honest.

Swent: So the anti-war thing wasn't as strong.

Lyons: It wasn't a big feature in my life, although I was very much aware of it. I think we had one protest in Clearlake. I remember--I think we were on Austin Beach, walking around in a circle, holding hands, singing "Give Peace a Chance" [chuckling] or something like that. That was the kind of thing you look back on and, although I was not in favor of the war, and I'm still not in favor of the war, but I still look back at things like that and kind of go--. People must have thought we were so dumb. Because we were funny. I mean, it was kind of funny, looking back on it. So smug. I can see now why people my age at that time got so put out with us, because a lot of us were just kind of smug know-it-alls. But I still think it was a just cause, though. My husband, Harry, went to Vietnam, and he's very much anti-war, too.

Swent: Earlier you mentioned that growing up here on the lake made you so conscious, of course, of the environment. That was kind of tied in with it also.

Lyons: Right.

Swent: I mean there was the other war, the environment.

Lyons: Right, right. There was that, yes.

Swent: And also this tremendous spiritual Eastern religion.

Lyons: That was another thing I remember. I think it was the big oil spill in Santa Barbara?

Swent: Yes.

Lyons: I remember going out with a group of people and collecting rags to send down to clean the ducks. I think that was when I was married to Ed. That must have been 1970.

Swent: Well, there was a big oil spill on the beach in San Francisco also. I think that was a year or two later.

Lyons: I don't remember. But we were just collecting stuff. We never really went down there. Yes, the environmental issues were important, too.

Swent: But you were not studying biology or ecology.

Lyons: Oh, no, no. I was more into experiencing--experiencing the world, I guess.

Swent: So you were married. You were still just eighteen.

Lyons: Yes. We were married until I was twenty-one, and then we split up.

Swent: You lived here then?

Lyons: Yes. We lived on the lake, across the lake. We were just too young.

Swent: He was very young also?

Lyons: Yes, he was twenty-three, and I was eighteen. But it worked out all right. We didn't have any children, and there's no hard feelings. In fact, I'm having coffee with him tomorrow morning. Bend his ear as my supervisor now.

Swent: So it didn't damage you too much.

Lyons: No. It was rough for the first year or two, but it always is, I think, for people.

Typesetter for the *Clearlake Observer*

Swent: Were you still helping your mother with the paper?

Lyons: Yes, yes. As I said, I started out fairly young, helping stuff papers when we had a paper that needed to be stuffed. And then in high school I used to deliver papers. I think my first job was writing obituaries, as far as actually writing. At the time when I was married to Ed I was a typesetter. It was our first big technical innovation at the Observer, changing a little bit from hot metal. We were still definitely hot metal, but what I ran was called an intertype. It was like a big typewriter; it had a

typewriter keyboard, and it had a needle that would go across to help--because you had to justify the lines. It was still like typing for linotype, but it had a different keyboard, and that's why I got to do it because my dad and brother ran the linotypes.

What this thing did, it perforated tape, so I would sit there and I would type this straight matter, it's called, you know, this copy for the newspaper, and I had to justify the lines. And you'd have to add spaces between words or sometimes you'd add thin spaces between letters at the ends of words, but that's not considered good typography; that's poor typography, the letter space. You want a word space. And ideally you word space throughout the whole sentence, but if you're in a hurry you're going to drop spaces at the end of the line.

So it had to be justified because then we'd take the tape and run it through the linotype machine. That was called the intertype, and the way it worked was instead of somebody typing at the linotype machine and sending the slugs up. [telephone interruption]

Swent: So somebody would send--

Lyons: So then they would just run the tape through this machine called the intertype, and it would activate the keys. The intertype looked just like a linotype machine. It was a big linotype with the melted lead, the pigs, melting the lead; and then it would activate the keys, send the type fonts or the--I'm not really a printer, so I don't know all the technology. But it would do exactly what a person typing would do, only it was automated by this strip of perforated tape. And it would send the slugs up, and then they would get molded and come down into the tray where you got your trays, your type, the strips of the lead type you used to build the pages.

So they had to be justified. If you don't justify the line with a linotype, you get what's called a front squirt, where if there's too many fonts in a line they're not going to fit in the line, and it causes the lead to burst out the front of the--where it's being formed at the machine. I'm not explaining it very good. But my dad used to always say, "Stand back!" He'd be sitting at the linotype, and we'd come up to talk to him, and he'd always push us out of the way because if there was a front squirt, the hot lead squirted out the front of the machine. So that's the whole thing about justifying it.

So that's what I did. I ran the intertype. I've done a variety of things for the paper.

Swent: Were you continuing with the meditation?

Lyons: Yes, but I got tired of that. I never did see my third eye, [laughing] so I gave up!

Master Subramunya at Bonanza Springs

Swent: Tell a little more about this Master Subramunya.

Lyons: He was an American master. He was an American who had gone to India and supposedly had been enlightened. And I guess he was headquartered in Berkeley; that's where Ed met him. He was a tall guy with silver hair. He was quite handsome. His followers supported him. Some people used to call him Master Supermoney, just to make fun of him. Of course they were the non-believers. I don't know what happened to him. I don't know if Ed knows what happened to him, either, because they left here, and he never became famous like Bubba Freejohn; he has become famous. Franklin Jones has Seigler Springs now, it seems. His name is Da Ava Bhasa now, or Adida. He's Adida now, I think.

Swent: Adida? And you said Bubba.

Lyons: It used to be Bubba Freejohn. Bubba means brother, I believe, in Sanskrit. His American name was Franklin Jones. But he's still quite well established. His main followers are people living on Cobb [Mountain]. They have a publishing company. You've never heard of him?

Swent: No, I don't think so.

Lyons: So I don't know what happened to Master Subramunya. Because Ed became a householder, so he was no longer a monk, and he kind of wandered away from it.

Swent: You could have stayed up there, both of you, could you have?

Lyons: No, no. I don't think I would have, anyway. But no.

Swent: Did he have classes? Did he do farming? Or vegetable growing?

Lyons: No, I don't think they did much. That's probably why they didn't last very long. It wasn't that well organized, probably.

Swent: How many people were there?

Lyons: Not very many. It was a long time ago. Probably twenty-five or thirty. It wasn't really a huge group.

Swent: But they lived there.

Lyons: They lived in little cabins, yes.

Swent: And meditated.

Lyons: Yes.

Swent: Where did they get the money that they supported him with?

Lyons: Parents, I guess. [laughter]

Swent: Okay.

Lyons: I don't know. Some of them probably worked. I don't think Ed was working at the time. Ed was on his way to India. He was going to go to India, and then he gave that up so we could get married.

Swent: It happened. It definitely happened.

Lyons: Yes.

Swent: And has it left much of a trace?

Lyons: I don't know.

Swent: It must have affected your life.

Lyons: The spiritual movement, you mean?

Swent: Well, any of it. How has it affected you?

Lyons: I think it made an impact on the way I live my life and view the world. I think that with a lot of people--it's true, it doesn't seem that way now, but it seems like a lot of people in my generation are really involved with the go-go kind of mass culture scene, but I'm still a pretty good liberal. Except for some of the social issues, I'm probably not that much of a liberal any more, but as far as environmental issues and international politics and relations, I think I'm probably--especially up here, in Mendocino County, we have a lot of fairly radical--not so much in Lake County, but we listen to the public radio station a lot in Mendocino County, and there's still quite a few radical liberals around. The big thing now is anti-corporate sentiment. And international corporations are trashing the environment world-wide, too. All the oil development and [chuckling] mining. I

know that your people are into mining, but there are some pretty horrendous things going on in the world funded by the World Bank still. Although the World Bank supposedly was supposed to be getting more environmentally aware, I'm not sure that they are.

Like, in the Audubon community. There's a lot of people my age that came up from that time who are very dedicated to environmental issues. Of course most of them are white male lawyers. [laughs] I don't have anything against lawyers. I mean, those are the people who you find in the upper echelons of even organizations like Audubon, so that's a whole other issue. You don't even mention the women's scene, too, that was going on then. All that was going on then. Anyway, I think that's always an interesting observation, even with the environmental groups. You know, the movers, people who are really calling the shots still seem to be the same--

Swent: White males.

Lyons: That's okay. They're nice guys, and they're doing a good job. I'm glad that somebody's doing it, but I'd like to see more women. Yes, I forgot about the women's issues, too. We had the self-help health movement and the women's health movement. I remember going to one meeting where they were teaching women how to examine themselves.

Swent: That was a big thing.

Lyons: We had the speculum? [laughing] I remember thinking, "Oh, no, I don't want to do this!" I was kind of embarrassed about it, I didn't do it, but I think it was neat. I didn't disapprove or anything, I was just a little shy. But it was neat, all this group of women got together and said, "Now, look in here. This is your cervix. This is this, and this, you know, that's what they're looking at when they're looking at you down there." That was pretty cool.

Swent: It was a valid movement.

Lyons: Yes. I think that was in Ukiah. I had a lot of friends in the Ukiah area, and that's where more of the action was going on.

Swent: Were the followers of Subramunya mostly men?

Lyons: I think so, yes.

Swent: Women's lib wasn't a part of that.

Lyons: I don't think so, no. They followed the kind of traditional idea that the man was supposed to be the master, that sort of stuff. But I never really associated--I don't think I even met any of Ed's friends from there. And it didn't last up here very long.

The "Hippy Trail" and Popayan, Colombia, in the 1970s

Swent: So then after your marriage fell apart, you continued here, working.

Lyons: Yes. Well, then I started traveling.

Swent: When did you get involved with the Audubon Society?

Lyons: Oh, that wasn't until the eighties. Throughout the seventies, my goal was just to have fun. And I did. I traveled. I went to Colombia three times. I went down there, South America, and I lived in Santa Cruz. It was kind of the hippy trail. I started out by going back to the Midwest with a friend and then going down to Florida and going to Jamaica and hearing the Colombian--

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Swent: But it took money to get there.

Lyons: Yes. I don't know. Three hundred dollars or something. So I saved up my money, and off I'd go. My poor parents. They say now, "We knew you'd be okay."

Swent: That took a lot of faith on the part of parents.

Lyons: But it was fun. It was a good experience. In Colombia, that was before all the really heavy-duty--there was cocaine trafficking going on at the time. That was in the seventies, but it was just starting. It was kind of a Wild West type of a place, but it wasn't really scary. It was neat.

Swent: Where were you in Colombia?

Lyons: I went to Popayan, mostly. It was kind of a classical city in southern Colombia. It's well known for its classic Spanish architecture. It was a colonial seat of government. It was a picturesque town. It was pretty badly devastated by that earthquake, though. I don't remember when that earthquake was, but I haven't been back there for quite some time.

Swent: You went with a group of friends?

Lyons: Yes. I went with my boyfriend the first time, and then I met people down there. One fellow worked on the riverboats in Mississippi. He'd go up and work for six months and then come back down. They were working people. They weren't drug smugglers or anything. They were just people who liked it down there. And another couple of friends of mine worked as bartenders in Nashville, and they'd come. That's what we did. We'd go back to the States and work, and then we'd go down and live in Colombia on these farms that we rented and the house. So that was neat.

Swent: Did you work at all there?

Lyons: No, [laughs] we just slouched around, took little trips.

Swent: Did you learn Spanish?

Lyons: A little bit, yes. My friends learned it much better than I did. They spent more time down there.

Swent: You didn't get really involved?

Lyons: No, no. Looking back on it, I would have probably done a lot of things differently, but I was too young at the time. And I wasn't doing anything creative or beneficial or anything. [laughing] It was just total vacation. People were saying, "Did you do this? Did you--?" "No, I didn't do that. No, I didn't do that." We had horses. We used to ride our horses around the countryside and go to these neat little Indian towns and buy ponchos and stuff. That was about it.

Go to the market. That was a big thing. Because everything was so natural. Of course, at the time, it was "Oh, this is the way to live. These people are so wonderful." And they'd grow all this stuff, and you'd go to the market, and there would just be stalls of beautiful fruits and vegetables and giant papayas. And we knew there was poverty, but in the area of Colombia where we were it was not too bad. We weren't that dumb that we didn't think about that, but it wasn't our main concern because we weren't hanging out in Lima, where the real nasty poverty was. We were in the country, where even poor people were doing all right. I know my friend--the couple that lived on the farm that we rented, he used to try to help them out. He'd help them out financially. So it wasn't that we didn't care. We were just doing our own thing.

Swent: You were young.

Lyons: Yes, we were young. I was in my twenties. But there were people in their twenties who were doing constructive things. We'd meet people--students--coming through who were doing anthropological studies. That was neat, too, but it's not what I was into at the time.

Swent: So then you came back.

Lyons: Yes, I came back. I guess my last trip to Colombia was '78. I had the same companion the whole time. His name was Richard, Richard Mason.

Swent: He worked on the paper.

Lyons: Yes, he did a lot of Homestake stuff. That's how he got involved with the Observer.

Swent: I have met him.

Lyons: Okay. He's doing really well now. He's gone to Columbia in Missouri, and he's getting his Ph.D. in journalism, so we sort of launched him on a journalism career. He's quite a character. Very, very intelligent person, but abrasive. [chuckling] So anyway, Richard and I bought the property in Morgan Valley. I think we bought it in '79 or '80. That's where we bought the twenty acres. Had this horrible shack on it. Are we ready to go into that?

Morgan Valley in the Early 1980s: a "Pristine Dell"

Swent: Yes, we can, if you are ready.

Lyons: One thing I want to talk about was my perspective of Morgan Valley, growing up, and then I want to get back to this.

Swent: Yes, do that.

Lyons: Morgan Valley, that was kind of the Wild West to us. It was this untouched area that--we knew the people used to live out there, had settled out there in--Alta Parks. Have you interviewed Alta Parks?

Swent: No.

Lyons: Well, she's getting up there now, but I think she was born out there. I think her uncle or her grandfather was Albert Morrel,

and he was the first principal at the historical Lower Lake Grammar School, the one that's now a museum. She was very much involved with horses, so we were involved with her because she taught our junior horseman's group for 4-H. She used to tell us these stories about Morgan Valley and how she used to ride out there when she was a kid. She'd go out there for days and herd cattle around. She was just this kind of real independent, Annie Oakley type. I guess it was closer to Lower Lake, where they used to have a rodeo and it was really quite the thing.

So to us, the Morgan Valley was just this really neat place with old buildings. And at that time some of the old homesteads were still standing and, of course, the old Knoxville mining building that was torn down. I believe it was owned by Palmolive at one time, the Palmolive Corporation, and I think Homestake bought it. I believe it was Homestake that had it taken down. I think they just--

Swent: That's way beyond Morgan Valley. I mean, it's on Morgan Valley Road, but way beyond the actual valley.

Lyons: Right. Yes, it's beyond.

Swent: It's over in Napa County.

Lyons: But it's not beyond the mine, though.

Swent: It's beyond the mine, yes. Not way beyond, but several miles.

Lyons: Do you know the building that I'm talking about?

Swent: Yes, the old stone Knoxville building.

Lyons: The one that they tore down.

Swent: There's a county line there, and it goes on to Berryessa.

Lyons: But Homestake owns that. I believe it was Homestake that had it dismantled, though, wasn't it?

Swent: I think not. I'm not positive, but I think the Gamble family did.

Lyons: Yes, I think you might be right. They said it was a liability.

Swent: That was later.

Lyons: But it was still just sort of a simple--

Swent: In fact, I did see it when I first went there.

Lyons: That whole area was just neat. Even as a teenager or in my twenties, you'd just take drives. Drive out there, drive on that road. So that was kind of what it meant to us.

Swent: You had a really romantic feeling about it.

Lyons: It was the wilderness.

Swent: You were not aware that there were a lot of mines around there?

Lyons: Oh, I think I knew there were quicksilver mines out there. I'd heard of quicksilver. Yes, I think I heard of the Reiff Mine.

Swent: The Red Elephant. They had wonderful names.

Lyons: Yes, the Red Elephant. I think we knew they were there.

Swent: There were a lot of mines there. Quicksilver. I guess most of them were mercury.

Lyons: Yes, I think most of them were mercury mines.

Swent: They weren't mining at that time.

Lyons: So anyway, I liked that area, but also I never really thought about living out there because it just seemed like--you know, being used to living by the lake, I like the lake. It always seemed kind of hot and dry out there. But then when Richard and I looked at this property, one side of it was oak trees. There was brush, but there were also a lot of oak trees. It was just a real pretty little spot, and had a winter creek running through it, so we bought it from the quintessential Morgan Valley hippies. [laughs] You have heard about the Morgan Valley hippies, right?

Swent: No.

Lyons: They were like--that's sort of a general term that people used for just sort of a class of--I don't know, just people kind of--I'm not quite sure how to say it. I don't want to be too disparaging.

Swent: They were newcomers who had come in?

Lyons: Yes. They were just kind of low-life, I guess. [chuckling] There's no other way to put it. Kind of dirty. They would move out to Morgan Valley because they could live in little shacks out there and not work, and probably some of them were growing pot. I don't really know for sure. But just kind of a rough lot, you know? They weren't your typical flower-child type. They were more of a rougher lot, and, you know, "those people are Morgan

Valley hippies," and people used to tease me. "You're going to be a Morgan Valley hippy."

So we bought this little shack from these people and put a lot of work into it. By the time we were done, it was really quite liveable. It was very small. It was probably only, I don't know, maybe as big as this kitchen. I'm not very good at space. But it was just one room. And then we had a little addition, where we had a tub and a shower. And we had a gas stove, and we had a sink, and we dug our own septic tanks. We had an indoor toilet.

Swent: You had running water, then?

Lyons: Running water. We had a very good well. And we had a storage tank up on a hill. We used to charge up the battery in the car so if we wanted to watch TV, we could watch TV or listen to the radio with batteries. And we had kerosene lamps.

Swent: You didn't have electricity.

Lyons: No electricity. But we had a little loft that we slept in. We got some wood out of one of the old houses on Morgan Valley Road that was pretty well--it already had been dismantled basically, but we got some pine out of that to do the wainscoting and the cabinets. Built a little deck. It turned out--it was cute. It was comfortable.

Swent: Was it on the road?

Lyons: No, it was on Reiff Road, right across now where the tailings pond is, where Morgan Valley Road and Reiff Road split. We were about a half mile down Reiff Road. The driveway took off from Reiff Road.

Swent: I thought Rieff Road went <u>away</u> from the tailings area.

Lyons: It does. Yes. See, Morgan Valley Road was like this [demonstrating], and then Reiff Road went like that. And then what they've done is they've turned--Reiff Road is no longer--it's Morgan Valley Road now. It's not even another road. They got rid of that part of Morgan Valley Road and made Reiff Road part of Morgan Valley Road. But at that time Reiff Road went down, and there was a real pretty hill, oak-studded hillside. It was an interesting contrast because it was like a little canyon, and one side was an oak-studded hillside, very beautiful black oak, which is kind of unusual for out there because it's mostly blue oak. I think there's some valley oak, too, but this was a beautiful hillside of black oak. And then the other side of the hill was brush. So it was neat. I liked that contrast. Then we were back

in this--not really a canyon but kind of a dell or whatever, where the little creek ran through. That was, I think it was '79 or '80.

Swent: Well, the discovery of gold was in '78, and they announced it then in 1980.

Lyons: Yes, that sounds right. That sounds right because I think we'd been out there about a year.

Swent: Were you aware of the coming and going?

Lyons: No. We didn't have a clue that anything like that was going on. I probably would have thought twice about buying land out there if I had known. But I remember when they announced it, kind of thinking "Hmm. Heh-heh. What's this gonna mean?" It meant what I was afraid it might mean.

Swent: Expand on that a little.

Lyons: Well, I liked Morgan Valley, even though it took us forty-five minutes to get out there. The road was horrendous. Forty-five minutes. Mile-wise it wasn't really that far from town, but it was just bad road, no electricity. But when we were driving out on that road and thinking, "This is so neat," there were no power lines. It was really pristine in that it was untouched. You could look out across the vast hills, and there was no evidence of human beings, I guess. I liked that part of it. I thought that in its own way it was a really beautiful place. So when I heard about the discovery of gold, I thought, "Oh! Well--" And then the more I heard about it. Strip mine. Oh! You know, it was kind of depressing at first. I was not happy about the idea of a giant strip mine going in out there and all it entailed.

Swent: How did you hear about it?

Lyons: Well, the documents and just talking. They said how they were going to mine it. They were going to dig a big pit. It all came out. We did stories in the Observer on it.

Swent: That's how you became aware of it, through the announcements they made.

Lyons: Yes. They didn't come to us and talk to us or anything about it beforehand.

Swent: I guess what I was--and I'll talk to your mother more about this, too. I was wondering about if there was a dichotomy between the

local gossip and the official announcement that you were getting at the paper. But your mother may know more about that.

Lyons: I think they kept it <u>really</u> quiet because I had heard nothing about it. I mean, maybe somebody knew. Maybe the Landmans or people who were close to Bill Wilder. Maybe Gene Magoon. I don't know. He may have known. I think Gene Magoon may have known, but he's pretty trustworthy. If someone told him, "Don't say anything," I'm sure he wouldn't, because it was pretty secretive.

Swent: Why would he have known?

Lyons: Because I think he was pretty good friends with Bill Wilder.

Swent: I see. I wondered what his connection was.

Lyons: Yes, the Magoons had the store in town that burned down.

Swent: A lot of the traffic, though, I think, was going the other way, on the Lake Berryessa Road.

Lyons: Traffic in the sense?

Swent: Well, the access to the mine at that time. I think they were going more from the other, the Berryessa side.

Lyons: Yes, it's possible. And see, I don't really know. Was the One Shot Mine operating then?

Swent: Yes.

Lyons: Was it? Okay.

Swent: It was selling decorative rock.

Lyons: Oh, that's right. Okay, yes. Right. Yes, I have some of that yellow rock.

Swent: And he was reprocessing batteries.

Lyons: Yes. But anyway, I wasn't really thrilled about the whole idea of a big strip mine going in out there.

The McLaughlin Mine Brings "Unfightable" Changes

Swent: Why do you say strip mine? That had connotations for you, obviously. That's a term they use in coal mining. This was not a strip mine.

Lyons: They call it a pit mine, isn't it? What do they call it?

Swent: Open pit.

Lyons: Open pit mine. Yes, I guess--

Swent: Strip mine was the word that had bad connotations for you, obviously.

Lyons: I think so. I was a big fan of [chuckling] I can't think of his name now! You know, Muhlenberg County? Oh, God! That famous folk singer [John Prine]. I'll think of it in a minute. "Mr. Peabody's coal mine, done hauled it away."

Swent: Johnny Cash?

Lyons: No, no. Not Johnny Cash. God! I can't believe it! I'll take a look in my album.

Swent: Well, anyway, so you were connecting this with coal mining.

Lyons: Yes, kind of. Just the whole idea that they were going to make this big hole and it wasn't going to be very attractive. But then what was going on--okay, that was 1980, when they announced it. And then there was a long period of permitting, a long permitting process, and publicity and talk. I remember going out, and they had a big party out there for the media that we went to. I don't remember when that was. I met the people involved. I liked everybody involved with the mining. It seemed like they were fine. I liked the people.

But I remember, after this party, and I think we had looked at some maps at that time and talked about stuff. Finally, it dawned on me where the tailings processing plant was going to be, the hill that it was going to be on. Because I went home from that party. They held it out at the site of some old homestead out there that was on the mine property. I went home and walked around, looked up at this hill, you know. I thought, "Oh, God. There's going to be a big something on top of that hill. And the tailings pond is going to be across the road from us." So I remember being fairly depressed about it.

But what happened was my personal life changed, and Richard and I broke up at the same time that was happening, so my life was in sort of a turmoil. And so by the time that the actual development of the mine was going to start, I was ready to leave. I was ready to move away, and they wanted to buy us out because we were in the sphere of influence of the tailings pond. I don't know--if things had been different, if Richard and I had stayed together and I had really wanted to commit myself to living out there, if I would have tried to fight it. But at the time it was just something that was not fightable. It was not fightable. It was going to be too good of an economic benefit to the county, and the company was a reputable company, and they were doing everything that was being asked of them and required of them. It just was one of those things.

I know some people did try to fight. I think Mike Johnson. Never got very far. It was too big.

Swent: Was there any organized effort?

Lyons: No.

Swent: It didn't really coalesce.

Lyons: No, it just never did. And then when they offered to buy us out. It wasn't a bribe or anything. They wanted to buy us out. I don't really know. Now, I have some friends who live right next door to the place where we lived, and they were living there when the thing was working, so I thought at the time they were buying us out because it was too dangerous to live so close to the tailings pond, but I think they were just trying to be, you know, it's like, well, "We know you're not really happy about this and if it's upsetting you, then we'll buy your property." [chuckling] Which was nice of them, I guess. They gave us our asking price. But we didn't inflate the price, either. We asked a reasonable amount for the land.

Swent: You had bought it together, you and Richard?

Lyons: Yes.

Swent: Your break-up. Was that because of disagreement over the mine? Anything like that?

Lyons: No. Because I met Harry! [laughing]

Swent: Oh, I see. Okay. So it wasn't philosophical.

Lyons: No, no, no. Richard and I, we just weren't well-suited. Finally I had enough impetus to go through with breaking up with him. Like I say, I went to this peace dance with my friend, and I guess Richard was hunkered down out at the cabin or something. [laughs] My friend and I went to this peace dance. It was at Lower Lake High School. At that time, I remember there was an anti-nuclear group. That was in the early eighties. That was still the height of the Cold War, sort of, so we had a pretty active local anti-nuclear group and they had this peace dance.

Harry was there with some friends, and we had a few dances. And I interviewed him. He was working for the Konocti Winery at the time and I had an interview with him. That was sort of love at first sight, I guess. It's kind of bad that I was with somebody else, but things like that happen. At least we didn't have any kids. We weren't married, either, so--but I couldn't let Harry go. He was the love of my life. And he felt the same way. [laughs] I think that probably those personal things had a lot of impact on the way I reacted to the mine. My life was going in another direction anyway, and so I just kind of accepted it and said, "Aw, it's too bad."

And I didn't want to go out there for a long time. I didn't want to look at it. I didn't want to see what was going on. It was sort of changed forever. I knew that Morgan Valley would be changed forever, and it was. But a lot of people live out there. Not everybody who lived in Morgan Valley was a Morgan Valley hippy! There are a lot of nice people out there; normal people, hard-working people live out there. And they were quite happy to have the paved road.

Swent: That was a help out there.

Lyons: And electricity. They didn't mind that, either. So there was some good--and I think part of why maybe there wasn't a lot of people against it was because some of the people living out there, they wanted those amenities. And they lived far enough away from the mine. The mine was pretty far down there, and the people who lived in Morgan Valley itself, when you come into that big flat area, the valley itself, and you take that road, a lot of people live out to the left. There's a road that goes out to the left. And that was great for them. And you can't blame them for wanting a paved road and electricity.

Swent: Things are usually not either black or white.

Lyons: Yes, right. And then Homestake--I guess I could be naive, but they seem like a really good company. And I met Jack Thompson and he was just not a person that you think of as typical miners,

whatever you get in your mind as a miner. He was a very personal--he was a sweet guy. Jack was--I mean, I'm sure he could be tough when he needed to be tough, but working for the paper, I went out a couple of times and did some stories, and he showed us how they blasted out the tunnels and showed us around. That was good. And Ray Krauss. I interviewed the bat people. They were gating the old adits to protect the Townsends' long-eared or short-eared?

Swent: Long-eared.

Lyons: [chuckling] Long or short-eared bats. And we went up just to kind of see what they were doing. It was really interesting the way they did that.

You know how Dixie Pierson, the bat biologist. Bill Rainey was her companion, fellow scientist. I don't remember how they did it now. It was some way, something they would set in the adit that would register the bats flying by, and then they would download it on their computer. So I thought that was pretty interesting. Homestake did hire pretty good environmental people.

Swent: And they actually moved some of them.

Lyons: Yes, they moved some of them from the adits that they were destroying.

Swent: Were able to somehow lure them to another place.

Lyons: I guess it worked.

Swent: I think it did. They made quite an effort.

Lyons: Another thing, you know, was the increased traffic. But none of the concerns, even the increased truck traffic--I know people like the Staehles lived on Morgan Valley Road, right at the beginning, where it was still paved and I don't think that was ever too huge a problem for people, because they tried to keep the road up.

But one of the things I think happened--this is just my opinion, I don't really have any data to back it up--It just seems like during the eighties, because of the mine and maybe because the steam fields are still going pretty strong there, but there was sort of this growth burst in Lake County. And the county got really overbuilt, and now there are a lot, a lot of houses here for sale. And we're kind of in a depressed economy now. There's a lot of things that kind of result from that in that we're in a depressed economy, so that--the gold mine was good. It kind of gave a boost, but--

Swent: There was a depression at that time. It was depressed then.

Lyons: Yes. [chuckling] I guess maybe we just have always been depressed. [chuckling]

Swent: Maybe you didn't think of it that way.

Lyons: Well, no, not really. But I think that's part of why everybody was happy to see the mine come in, because it would help the county coffers and it brought in jobs. It mainly brought in more people, though. I don't know how many. I think a lot of local people got jobs out there, too, but a lot of people came in, and there was kind of this growth spurt. But now we're stuck back with--you know, here we are again, with all these houses. And the contractors are upset because they're not building any new homes because there are already so many homes on the market that we don't really need any more homes. And so the Chambers of Commerce is really trying to promote growth, which does not always go along with the type of growth that a lot of us with like to see.

And one of the big issues that came up--that was the latest push to get a state prison in here. That was last year about this time.

"Citizens for Positive Growth" in Lake County

Swent: What happened to that?

Lyons: Well, we voted it down, but it caused a tremendous amount of animosity among different communities in this county. This is very--it's not really related to the gold mine, but--

Swent: Well, it's part of the picture.

Lyons: The whole picture.

Swent: You built all the houses.

Lyons: Yes, and the people who need--I don't know what to say. It's not really exploitive. People who need to--anyway, the idea was that the prison would bring growth, would bring new people in, new people to buy houses, and the contractors would be able to build more houses, and the local business people, their retail stores would do better because there would be more people here, basically. And maybe some jobs for locals, but mainly it was going to be the payroll. The payroll of the prison was going to

be a godsend to every small business person in the city of Clearlake. But there were a lot of people who didn't want it, and it was a county-wide vote. If it had just been a city vote--the south county area approved it, but county-wide it went down to defeat.

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Swent: So you were opposed to the prison.

Lyons: Yes.

Swent: Was there organized opposition?

Lyons: Oh, yes. It was called Citizens for Positive Growth. But it was quite--

Swent: The Citizens for Positive Growth were the ones who were opposed to it?

Lyons: Yes. And it was kind of your typical group of--there were some environmentalists. Like, I guess I was seen as an environmentalist. And Peggy McCloud was the main spokesperson, and she's on the planning commission. She just retired up here, and she did not like the idea of a prison coming in and she battled it out. It got pretty nasty at times. And a lot of people feel very resentful of the people who opposed that prison. It became almost a personal thing. It got to that level of animosity, so it was pretty nasty. But we won! [laughter]

We won, for a change. Because those of us who were opposed to it, we didn't want to see that kind of growth. We thought it was too much growth. And the CDC [California Department of Corrections] fed them all kinds of propaganda about how wonderful prisons are. It was kind of interesting. After this whole thing --you know, we'd been getting a lot of information, well, through the papers, anyway, about the CDC that's not quite as--. And they come in and try to really--they want to build prisons, but they need to have places that will accept them. And it's totally one-sided, of course, all the positive things.

Serious Social Problems Beginning in the 1980s

Lyons: One of the things that we were concerned about were social issues because the city of Clearlake already has some serious social problems. And we were afraid, you know, kind of prisoner families

following their prisoners. And they say they don't do that, but then again, in the fine print, they say, well, in low-income areas, where there's cheap housing, that does tend to happen.

You were saying something about the drug labs and the social issues in Clearlake. And there is a very definite problem in the city of Clearlake because of all the low-income housing, because of the old resorts that were turned into permanent rentals. It's a pretty familiar story in areas like this. It was a middle-class resort area from probably the forties through the seventies, and in the seventies it started going downhill. It used to be a really lovely little town. And then a lot of resorts, because of the various problems with the lake, with the algae, the opening of Interstate 80 to Tahoe, people changing their vacation habits--there was a variety of reasons why it happened--the resorts fell off. It happened on the mountain, too, on Cobb Mountain. Lake County used to be a major, major resort area with the hot springs resorts and the lake resorts, and because of infrastructure and all these other social reasons it declined. So the little rentals--somebody can come up here and rent a little cabin for $250 a month and collect their welfare and live here. And so we have a lot of people doing that in Clearlake.

Swent: And people who are retired.

Lyons: Yes. Unfortunately, a lot of them are drug abusers. A lot of them are into speed. As a matter of fact, they're having some drug labs busted here. Quite a few. It's like the drug of choice because it's cheap and it cranks them up. It's really a big problem. And it goes into the schools. I mean, not the speed, but the problems, you know. When you have these kids who aren't being taken care of going to school, the schools have to deal with that issue.

And somebody was telling me, and I never correlated this before, but I was talking to someone--I guess she is a little bit of a radical--but she thought that the decline started [chuckling] when the mine came in. She said, "Well, I think the mine brought a lot of attention to Lake County. People heard about it, or some people came up here, thought maybe they'd get jobs and they didn't, and they ended up in Clearlake." And I don't know if that's a fair assessment or not. It did seem that the heaviest--there was a real decline in the city during the eighties, which would seem strange. The mine was supposed to have this positive impact.

Swent: Maybe it didn't.

Lyons: I don't know. That's something no one--I don't know if other people have had that observation or not. Maybe it did make people more aware. Maybe some people knew somebody working up here and they said, "Oh, gosh, you can come up here and rent, and do drugs and whatever," but now it's a real problem. As I was saying, I'm not as liberal on social issues as I used to be. You have to be careful about how you talk about it, but it's sort of like they're not the noble poor. I mean, some of these are pretty--. And the women with the kids. They have kids, but that doesn't mean they're good people because they have children. You know, some of these people are just--they're really pretty awful people. They're just speed freaks. They don't take care of their kids, they don't want to work, they're strung out. I think some of them are getting help. There's a new program. The local judge has a new program where instead of sending people to jail, they have to sign a contract to really go straight, and they have their urinalysis and stuff. That's having some success, but I don't know what we're going to do about that.

Swent: You think it's mostly speed, meth?

Lyons: Yes, yes. But now they're starting to get heroin, too. Heroin has always been around, I think, but there's more of a problem now. I think it's becoming more and more prevalent.

Swent: I was wondering if you sensed any difference--you know, in the beginning, the people that came in were construction workers who would be mostly temporary people. They'd move in, stay for a couple of years, and then move on. And then after that it was an operations period, when the workers would be more apt to stay, reside here. I don't know if there would be a difference that you would feel with that.

Lyons: I didn't really notice.

Swent: Part of their permit was to hire a high percentage of local people.

Lyons: Yes.

Swent: I think it was 60 percent or something like that that they had to hire locally.

Lyons: If they could. They had to make every effort.

Swent: But there still must have been a number of people that came in.

Lyons: Yes. And a number of them left, too. I mean, just this last year I know at least three families that took their kids out of Lower

Lake Elementary and moved to Nevada. That was sad, too, because my daughter's best friend was one of them. They moved to Winnemucca.

Swent: They've stopped mining, actually, now, I think.

Lyons: At the Homestake? Yes.

Swent: They're processing; they're not mining.

Lyons: Yes.

Swent: Well, you know, this is very interesting and significant, I think, that there was a social change at the same time.

Lyons: It started in the seventies, but--I'm trying to think. I was gone a lot of time in the seventies, but it still was--I think the major, major decline was through the eighties, when it hit rock-bottom. And now it's going up, partly because the city is finally putting its foot down and abating some of these really awful kind of dives, really run-down places with boarded-up windows. They're just bulldozing them down. They've done that a couple of times now. There's a lot of positive mental attitude going on that. Still, there's no--and then the parole, prison people were right in that there are no jobs here. There's not a lot of opportunity in Lake County. It's okay for people like me, who finally--now, Harry and I struggled for a long time. He didn't get this full-time job until about a year and a half ago, when they finally created a position at the college. Before that, he was working three jobs.

Swent: What were they?

Lyons: He was a vineyard manager, and then he worked at the Mendocino Junior College and at Yuba Junior College.

Swent: Teaching biology.

Lyons: Yes, biology and math. And then I go to Cloverdale two days a week to work. So I understand the need for some economic development. I'm just not into just such a drastic change that the prison meant. But it is interesting. Because, like I say, you'd think that the mine was supposed to bring all this economic prosperity, and I don't think it panned out that well.

Swent: You wonder how much of it is retained in the community.

Lyons: Yes. And the spinoff has been, like I said, this overbuilding, which has made--now the contractors are mad, and so they want to

exploit every opportunity they can to do whatever it is to bring more people here, whereas people like myself, I don't think we need more people. I think we've reached our carrying capacity [chuckling] because we're in a basin. We have the cleanest air in the state, certified as the cleanest air--Lake County--by whoever judges those sort of things on a state level. But it's a vulnerable area in this basin; I just can't see too much growth here without a real impact on the environment.

Swent: People are spilling over from Santa Rosa, do you think?

Lyons: Yes. You know what happens? A lot of people, because housing is so cheap up here, they'll buy a house, and they'll commute to Santa Rosa. And then they can't take it any more, and they move back to Santa Rosa. [chuckling] There are quite a few people who do that in Hidden Valley, or maybe if they work in Calistoga that's okay, but I think after a while the commute gets to people. But there are quite a few people who do commute to the Bay Area. I commute to Cloverdale, but that's only two days a week. I wouldn't drive over there every day.

Swent: I've wondered what sustains Hidden Valley. It grows and grows and grows.

Lyons: Well, yes. It's still a pretty good retirement--I think one of the biggest incomes up here is Social Security. There are a lot of retired people. They like it because of the golf course. I think it was probably a lot of the retired people who voted against the prison. They didn't move here to live next door to a prison. So there's some growth in that area.

Swent: Are you satisfied with the schools for your child? She's just in first grade, but--

Lyons: Yes, so far. I like the teachers, and I'm involved. I work in her classroom one day a week and we kind of keep an eye on things. I think the public schools do a pretty good job. I think the teachers care. For the most part, they do a good job. I know they take a lot of flak.

Swent: Now, it's no longer first, second, and third grade together?

Lyons: No, no. There's twenty kids in her class, though, because of that class reduction. She likes it. She's doing really well. She's an excellent reader--top of the class in reading. It's fun for her. I just kind of take a wait-and-see--I don't know, the middle school apparently has problems, like all middle schools. They have a lot of gang "wannabes" and the drugs and wretched adolescent boys, [chuckling] so we're pretty protective. I don't

know. She might be shipped off to the Catholic school in Lakeport. I don't know.

Swent: Is that where people--

Lyons: That's where the quality [chuckling] kids go. Mostly Lakeport, though. The Lakeport quality are the people who started it. That's being kind of facetious, but they have the time and money and they wanted to do it, so they started a private, Catholic school. But it's in Lakeport, so I would have to drive her all the way up there every day, and I don't know if I want to do that. I'm sure it's a good school.

Swent: Did your family have any religious connection? Were you church-goers?

Lyons: Yes, we were Christian Scientists. My mom's a Christian Scientist. We went to the Christian Science church in Lakeport. At the time, there were quite a few people there. We had a Sunday school, a number of kids in the Sunday school. And now, they can't hardly keep it going, I think. I don't know if the church in Lakeport is still open, but I don't think the Sunday school is. And I know where my mom goes to Healdsburg now they have a society. They change into societies instead of a church.

Swent: There's always been this health consciousness in this area with the hot springs, too, which would tend to tie in with a strong Christian Science movement, I would think.

Lyons: I don't know, because they don't--

Swent: They don't use medicine, but they're interested in health.

Lyons: Yes, but health to them is just a state--you're just healthy, no matter what you do. [laughing] The hot baths have nothing to do with it; you're healthy because God made you that way.

Swent: Okay, all right.

Lyons: I'm not a Christian Scientist any more, although I do think they have some good ideas.

Swent: I lived in a house once that Mary Baker Eddy had built. I'll tell you about it later, so I did get quite interested.

Lyons: It's an interesting religion. Right. My mom is a devout Christian Scientist.

Swent: I think a little Christian Science is good for all of us.

Lyons: I think so. Definitely none of us kids are hypochondriac, I'll tell you that! And my mom, you know, she's going strong. She avoids doctors at all costs. She's seventy-seven, and she's very healthy.

Swent: That's terrific. I'm all for it. Several of my best friends are Christian Scientists, and they make wonderful companions; [chuckling] they don't bore you with their operations and their medicines.

Lyons: We had this one aunt up in Washington. She had several operations in her lifetime. She lived for her operations. Yes, some people are like that.

Swent: No, the Christian Scientists are much better.

Well, we haven't talked about your land trust and your Audubon Society, and we do need to get those. There may be more you want to say about the community, too.

Lyons: I don't know, unless there's anything that I haven't touched on. It didn't seem like I talked about the mine all that much. That's kind of more in the context.

Swent: Well, your feelings about the mine, not the technicalities of it, but your concern, what it did to your life and to the community, I think, is significant. Did you have friends, other friends that you were sharing these feelings with? There was this group you mentioned and Peggy McCloud.

Lyons: Yes, but that was much later. At the time, I wasn't really involved in any community--I wasn't involved with Audubon Society or any--that came later. I met Harry, and then--

Swent: He was an environmentalist, wasn't he?

Lyons: No. He's an ecologist. [laughing] There's a big difference. He's not involved in any kind of community. I mean, he shares my environmental ideas about certain things, but he's, well, he's so busy right now he couldn't really be involved in anything, anyway.

Swent: He has a Ph.D. in--?

Lyons: Oceanography. And he's a classical ecologist, I would say. When I met him, he was just doing the vineyard management. Anyway, so we got together, and I was still working for the Observer, and we lived together. And then we were married in 1984. And I think it was around that time, some time after we got married, probably '85, '86--I'd always been interested in the Audubon Society

because we used to run their press releases in the paper, and I was starting to get more and more concerned about environmental issues locally. You know, as you get older you just become a little more focused.

Protecting Clear Lake: Audubon Society President

Swent: What were some of the issues that the mine--

Lyons: The mine was sort of a done deal by then. I think at that time one of the things that was going on was the NCPA wanted to build this huge power line from the steam wells over to Sacramento Valley.

Swent: What's NCPA?

Lyons: Northern California Power Association, I believe. It's a group of cities, one of the few sort of private entities that gets power from the geysers, from the steam fields up there. You know, PG&E runs most of them. Well, the NCPA is a consortium of cities. It's Healdsburg, Windsor--I don't know all the cities. Maybe Novato. Several cities. And they actually built a couple of power plants up there. And they wanted to build this big power line to feed the power into their grid, so that was one thing. I remember going to a few meetings on that.

But the lake has always been a big concern of mine. I saw this slide show by a Fish and Game biologist, Larry Week, who had this really good presentation on what the destruction of the wetlands around the lake was causing, its impact on the habitat and on the fish and birds. I love the lake.

Swent: The little otters here that we watched earlier.

Lyons: Yes, the otters were never here when I was a kid, so things aren't all that bad. Things are getting better. There are more of certain types of animals around. I think a lot of it had to do with the lake. So I called up the Audubon Society and said I wanted to volunteer to do something. So I started doing the newsletter. That's how it started. And then I just got more and more involved. I really like the people. We have a really good group of people--very cooperative, we like each other, there isn't any--you know, sometimes there can be tensions on boards, but our Audubon board is friendly to each other. We all like each other a lot.

Mainly I just did the newsletter for years, because Kate was born in 1990 so that kept me pretty busy for the first couple of years. Then I started getting more involved, and now I'm president. [laughing] I've been president for the last two years. Now I'm president again for a third year. My issues involve the wetland habitat around the lake, trying to keep people from ripping out tules in their front yard. Because most people, either they don't realize or they don't care that the lake shore is public trust. It is not privately owned. It's public trust to the high-water mark. And people actually do not have a right to do whatever they want to do, but they think they do.

So we're trying to educate people, and we're thinking about trying to do something on a legislative level involving Fish and Game laws, the permitting process and stuff, but not too much is happening with that right now. But I would say that's probably mainly why, because we have heron rookeries on the lake, and there's a lot of wildlife habitat. It has always bothered me that people have this image of Clear Lake as just this big green stinky awful place, you know. Some people do; not everyone.

But the algae problem is a distinct problem. They don't realize that there's a lot of wildlife habitat here. And we're doing a wildlife festival on April 12th, called Heron Days. We're taking people out on Anderson Marsh to look at the heron rookery, and we're doing field trips, and we have slide shows, trying to educate people about habitat around here, why they should care about it and why it's important.

Swent: Anderson Marsh is down a ways.

Lyons: Yes, that's already a state park. There's a big rookery in there.

Establishing the Lake County Land Trust

Swent: There's the land trust, then.

Lyons: Yes, the land trust is another thing. Yes, now the land trust. I decided that Lake County probably needs a land trust. [chuckling] Everybody else has a land trust. Because there's a lot of land around here that I feel should be acquired, especially on the northern end. It's zoned ag[ricultural] right now, but it's all this beautiful tule marsh on the north end of the lake. It's privately owned and it's in agriculture now, so it's not too badly impacted. So I got together with a few people--some of them are the same people involved with Audubon--and they agreed that, yes,

a land trust would be a good thing to do, so we started this land trust. That was in '93, and we still--we've done one small project with Fish and Game, where we accepted a deed--

Swent: That's the state?

Lyons: State Fish and Game. --with the Habitat Conservation Board that is the arm of Fish and Game that acquires property. And we helped them to acquire, like, a buffer zone on a vernal pool on Cobb Mountain. That was kind of a minor project, but it was something. And we're very much interested in trying to acquire Rodman Slough, which is on the north end of the lake. And it's called Rodman Ranch. There's about four hundred acres, and that's the site of another big heron rookery, and it's for sale. Willing sellers. All we have to do is find the money. And we're trying to find it through the Land and Water Conservation Fund, which is a federal fund. So that's our big project. That's the land trust's big project.

Swent: Are you getting advice from outside?

Lyons: Yes. We had a lady come up and do a little seminar on how to get LWCF money. Actually, we're meeting with [Senator] Dianne Feinstein on Wednesday. The Audubon Society, National Audubon Society is interested, too. So, unless she has something better to do [laughing]--she might blow us off at the last minute.

Swent: Is she coming up here?

Lyons: She's going to be in San Francisco. Oh, no. We have to go to her. So I think we're going to go. We're going to do it. I'm kind of wondering what to wear, but [laughing] I don't have any suits or anything. What do you wear when you meet a senator?

Swent: I don't suppose it matters. No politician is going to be critical.

Lyons: We thought we'd get our picture taken with her and run it in the papers up here.

Swent: She'll treat you well, no matter what you're wearing.

Lyons: [laughing] I'm sure she will. But that's kind of exciting. My friend is more into it than I--I thought, "Oh, I don't know if I want to drive to San Francisco."

Swent: Who is your friend?

Lyons: Mary Tulanian. She's on the land trust board. She is real excited about it.

Swent: Well, I should think so.

Lyons: Yes, that will be fun if it ever works out. But National Audubon, actually, has put us on one of their lists, priority lists, for acquisition through the Land and Water Conservation Fund, so they set up this meeting with Dianne, and they want to talk about Rodman Slough, so we said, "Okay, great. We'll go down there and talk to her."

Do you know what the LWCF is? It's a fund that was set up in the sixties. It's money from offshore oil drilling taxes or leases? Offshore oil lease money that was supposed to go into--

Swent: From Santa Barbara?

Lyons: Anywhere in the United States. It's supposed to go in this fund to purchase land for wildlife habitat, but it keeps getting pilfered by Congress, so they don't spend--they don't use much of the money for anything. Now there's a big push on to get Congress to use the money for what it was intended to be used for.

Swent: Because they have to be reminded.

Lyons: Yes. So that's about it.

We do a lot of local problems, and Audubon has a monthly meeting, and we have two field trips every month. I publish a newsletter every month. I get to sound off. I have a captive audience.

Swent: Sounds good. Well, I think Lower Lake is lucky to have you.

Lyons: Thank you.

Swent: I do.

Lyons: I like it here. Harry and I have a nice life here. We love this place. It's been a lot of work to keep it up, but we love it.

Swent: It's a beautiful place.

Lyons: Kate and I go down and play on the rocks every day, almost, now that the weather is nicer.

Swent: She's a lucky little girl.

Lyons: Yes. What else? I guess that's about it.

Swent: Well, what's ahead for you? Or for Lower Lake? For both of you.

Lyons: I'm kind of an optimist. I think things will get better. I think there's a lot of--I have my worries and concerns about this go-go growth Chamber of Commerce types who really want to push growth at all costs. You know, "Let's get more jet skis on the lake," and "Let's do this and that." But I think there are enough people here who aren't going to put up with too much nonsense. I have to be optimistic or it would be depressing. [chuckling] It's kind of depressing.

I'm involved also on a lot of different committees and boards that have to do with the economic development and marketing of Lake County and management of the lake. And I'm on about two or three different commissions and boards, just because I--

Lake County Resource Management Committee

Swent: What are they? Let's name them.

Lyons: Okay. There's the Lake County Resource Management Committee (RMC).

Swent: That's a county--

Lyons: That's a county committee.

Swent: So you were appointed?

Lyons: I was appointed by the board of supervisors, yes.

Swent: And you said your former friend is a supervisor now.

Lyons: Yes. He's not the one who appointed me, though. [chuckling]

Swent: No, I would never have implied that! So you're working with the board of supervisors?

Lyons: That committee involves state and federal organizations. It started out as a coordinated resource management program to come up with a coordinated resource management plan. That's a government phrase in areas where there's a lot of conflicting resource uses. And people get together and try to come up with something that everybody can agree on. And in Lake County we have

the tourism, we have agriculture, and we have people concerned about the environment. So that's how it started out, to try to bring all the parties to the table, involving mainly issues of Clear Lake. But since then it's expanded to the whole county and its watershed--it's been a most successful program. Because we started this committee, the county got a big grant from the EPA to do a Clean Lakes Study, which they did and came up with some good findings on the algae issue. And it's brought a lot of watershed programs to the county and a lot of interest in cooperative working together.

Swent: Now, are you just advisory, or do you actually have the authority to--

Lyons: No, we're advisory. We're an advisory body to the board of supervisors.

Swent: I see. Do you have land-use planning apart from this?

Lyons: Not really. What happens--originally, we were supposed to come up with a land-use plan. That was not possible. It was not going to happen.

##

Swent: You are listened to by the supervisors?

Lyons: Yes. And I'm a Redbud Audubon Society representative on that. And then we have a Clear Lake advisory subcommittee, which is a subcommittee of RMC--dealing more specifically with the lake. I'm also a member of that. And that deals mainly with Clear Lake issues. And one of the things that's lately come up on that is this whole thing--you know, some people want to promote jet skis and how that can be done without damaging the environment.

Lake County Marketing Advisory Commission and Gaming

Lyons: And then I'm also on the Lake County marketing advisory commission, which is a committee to advise our local marketing department, which gets TOT funds to promote the county.

Swent: What's that?

Lyons: Transient Occupancy Tax. The marketing department gets that funding to promote the county and the commission was recently formed to advise them. And I thought it was--you know, I don't

really like being on all these things, but I thought if I didn't get on this board, it was just going to be--the first meeting I went to, the chair of the committee said, "Gaming and entertainment. Gaming and entertainment. Those are the two main things we've got going in Lake County." He's the director of Konocti Harbor Inn, who puts in the majority of TOT money. But, you know, he's not the only voice, and he shouldn't have the only voice.

So I raised my hand and said, "Wait a minute! There are some of us here who don't agree with that." And there are other people on the committee who agree with me.

But, you know, it's kind of like if all the people who are for more reasonable growth and are concerned about quality of life, if we all just say, "Oh, well, you know," then what I call the "boosters" are going to have their way. At least I think it's important to have a voice.

Swent: Something we haven't mentioned: are there Indian gaming casinos in this area?

Lyons: That's what he was talking about. We have four of them. It's a major industry. But that's kind of funny, too, because there's not that much impact on the community, other than there's probably a lot of poor losing their money that shouldn't be losing their money. I would say there was a negative impact in that sense.

Swent: It's not bringing in hoards of people from outside?

Lyons: You don't really notice because they just bus them right to the casino and there they stay. I don't think they have much of a--other than on Konocti Harbor Inn. A lot of people stay there and go over and gamble.

Swent: That's not Indian, is it?

Lyons: Yes, Konocti Harbor Inn. But, no, they did like a joint advertising promotion with Konocti Casino, the one in Soda Bay, the one that closed down for a while.

Swent: Is that Indian?

Lyons: Yes, they're all Indian, yes. But there's the Soda Bay, there's Robinson Rancheria, and then there's one in Middletown.

Swent: That's the one I've driven by.

Lyons: Twin Pines. And then there's the Elem, the one that got all shot up and never reopened. That destroyed the whole community.

Swent: That was just last year, wasn't it?

Lyons: About a year and a half, yes. That was a total disaster. I don't even know if people have moved back there yet. That was really bad. That was quite devastating to that community.

Swent: What happened?

Lyons: Well, there were just two factions [that] wanted to control the--just control everything, I guess--control the management of the casino. They started shooting at each other. People moved away.

Swent: Were there fatalities?

Lyons: I don't know if anyone was killed or not. I don't think anyone was killed. You know, the problem is that a lot of these feuds go way back. But when you introduce the gaming, there's so much money involved that it isn't just an old-time feud anymore. There's more at stake than just people not liking each other, so I think that's what happened over there.

Swent: Has prostitution been a big issue here?

Lyons: Not that I know of. No. I'm sure it's going on, but it's not something--

Swent: It's not a big issue.

Lyons: No. I don't know of any houses or anything.

Swent: The mine didn't--

Lyons: I don't think so.

Swent: I think that's probably in the old days and how you thought of workers moving in, but they come in now with families.

Lyons: Yes, they do, for the most part. That's just something that maybe I wouldn't hear about because I'm not really--

Swent: Well, no, you wouldn't probably be aware of it.

Lyons: I don't think there was a problem.

Swent: Interesting. There doesn't seem to be.

Lyons: Well, I hope I didn't stray too far off track.

Swent: No, no. I think we've gotten a lot of really good information. You did say you help at your daughter's school. Is there a PTA?

Lyons: I'm not involved with the PTA. I can't face another meeting!

Swent: But you do help.

Lyons: Yes, I work in a classroom here. We have a parent-community coordinator who does a very good job kind of trying to connect parents. The big thing now is they want their kids to learn how to read! So they have a big reading program, and they're all really working hard to teach those kids how to read! So they better learn how to read!

Swent: What about the racial situation here? Most people are white, I suppose.

Lyons: Yes.

Swent: A few Indians.

Lyons: When I was growing up, I think there was one black kid in our school, and there were more Indians than anything. But, of course, by the time we were in high school, the Indians dropped out. It was kind of sad. The one girl that I was friends with in elementary school, she was gone by the time--of course, her reservation got bulldozed. She lived on Cache Creek. It was one of--it's kind of gone down in history as _____ _____. [laughing]

Swent: I wasn't aware of that.

Lyons: Oh, yes. There was a little reservation on Cache Creek, and you know when they decertified the reservations in the sixties and Indians supposedly had control of their--

Swent: They were supposed to come to the cities.

Lyons: Well, a lot of them lost their land because they didn't pay their taxes or unscrupulous developers would come in, so that's kind of what happened on Cache Creek. This guy bought it. What was his name? Ralph Lewis. My dad took a famous picture of the old Indian chief standing by watching his cabin get bulldozed. And they had a cemetery out there, and a few years ago there was a big uproar because they started--they were doing something. I don't know if it was road construction or what, but they started uprooting a lot of bones, and so they fenced off the cemetery. But it was kind of not a very nice thing that they did. And they

put a mobile home park there. I never saw her again after that. Indians really took a bad hit in Lake County. You know, we were one of the areas where most--a lot, a lot of Indians lived here. I did go to school with quite a few Indians. The boys seemed to stay longer and a lot of them were really assimilated and they were good sports stars and their folks worked and stuff.

Swent: Did they live in a separate rancheria?

Lyons: Yes, I think a lot of them were from the Oaks, from Elem. That's why I recognized some of the names in this fighting that went on. But some of them just had their own houses, too.

And the blacks who came up here were mainly middle-class blacks from Oakland who came up here to fish. And now what's happening--I don't know how to say this without, you know--I don't--it's hard to say it without sounding racist, but what has happened is, what appears to be happening is a lot of maybe like the grandkids of people who used to come up here, now they're coming up. It's like we're getting a black community, but it's not the black community you would want. It's like criminal blacks, which is too bad because they're kind of drawing the criminal types. Yes, for the most part.

It used to be that there was the poor white trash that was the problem, and now it's this other element is moving in. And some people thought, well, maybe they're people whose grandparents had a place here and they were nice, middle-class people. And then as their social problems are impacting the younger generation of men, and they're moving--does that sound really terrible?

Swent: No.

Lyons: It's just an observation.

Swent: I don't think so. I think it's a fair observation. The people that used to come up were people who came for vacation.

Lyons: Yes.

Swent: You said they were middle-class blacks who were here vacationing.

Lyons: Yes, right. But now there are starting to be some racial problems, and that's why.

Swent: I noticed once when I went by the elementary school, I was interested to see there were a number of black children.

Lyons: Yes. But then, again, there are still some fine middle-class black families here, too. They're not all--I was saying as far as the negatives, but I know there are some just average black people here, too. There are more of them.

Swent: But this is a rather newer thing for them to be here in the community all year round.

Lyons: Yes. Oh, yes. Very new, yes.

Swent: They actually live here all year round.

Lyons: Yes. And then, of course, the Hispanic population is growing, too, even on this end of the lake.

Swent: That would be a newer thing also?

Lyons: Well, for down here. In Kelseyville there's always been--there's more of a permanent Hispanic population. Before, they had the bracero program because there was the agriculture, but now there's more of a permanent--and there's more Hispanics moving into this area, too.

Swent: There's a good Mexican restaurant.

Lyons: Which one?

Swent: The one in Clearlake. I'm trying to think what the name of it is.

Lyons: Well, there was the Laguna?

Swent: Yes. That's still there?

Lyons: I don't know.

Swent: I hope so.

Lyons: Yes. And there's a new one that's opened up in the Oaks, too, that's supposed to be good.

Swent: No, the one I'm thinking of is in Clearlake. I'm looking forward to eating there tonight.

Lyons: I think it's still there. Oh, yes, that's excellent food. See, Harry and I never do anything. We never go out! He works nights most of the time, so we really don't go out to eat much.

Swent: I've eaten there a few times and thought it was good, so I assumed there was a pretty good Hispanic community here that supports it.

Lyons: Yes, I think there is. But we have the same old--I don't know, every once in a while you have some unseemly thing happen, like the teenage boy that stabbed that young boy to death. And we're getting our share of weird crime. There just seems to be these adolescent boys who just don't get it. They don't get the moral coding or whatever when they're being raised, and they don't seem to have any consciousness.

Swent: Do you think it's tied in with drugs?

Lyons: Probably. Their parents were probably on drugs. They didn't get it. They didn't get any sense of right and wrong. That's what's the scary thing, you know? Because it's like they're not redeemable. And I think that's when things get scary.

Swent: Now, do you lock things up around here?

Lyons: We lock the house. And Scooter is our yellow lab. He's a very friendly, lovable dog, but he's a good watchdog. He sleeps inside at night. And I have a shotgun under my bed!

Swent: Do you really?

Lyons: Yes. I'm not afraid here. I don't feel threatened at all, though this place used to get burglarized. It's been burglarized a couple times before, when my parents had it. It got burgled. But most of the crime around here is still just people ripping off vacant homes. There's very little--but we had a bank robbery a couple of weeks ago. That kind of crime usually was unheard of. If we had a murder up here, it was just, "Oh, we had a murder!" But now we have a couple of killings a year. Probably, I don't know, five, six people get killed a year up here now. It's usually what I call kind of low-life-on-low-life crime. You know, some speed freak shooting another speed freak. So nobody gets [laughing] too upset about it. So we do have that kind of thing going on.

Swent: Gives you a headline for your paper.

Lyons: Yes, and the papers. [speaking in a very high pitch; impersonating a reader] "I don't care about these people. Why do you keep printing that? Just send them to prison. I don't care. I don't want to read about it every day. Who cares about these people?" Now, if it were some interesting citizen or something more sordid than some speed freak shooting another--.

But as far as just--you know. I mean, my dad--we've had a shotgun for a long time. I'd know how to shoot it, but I don't imagine I'll ever have to use it. But it's kind of nice to know

that it's there, if they get past the barking dog, if some maniac ever, you know, like the Clutter family or something in In Cold Blood. If some slathering maniacs show up at my door, I could have a chance, at least, before I called 911.

But we do lock our doors. It's always a little--like I say, the burglary is the main thing. And this would be an easy house to burgle. You could just pop those windows out real easily. The dog, when we're gone, is in the pen, so he wouldn't do any good anyway, so that's about it.

Swent: No, you can't find a simple, uncomplicated life anywhere any more.

Lyons: No. But you try not to dwell on things too much. But there are some pretty horrid things that go on. Just kind of--I think my main concern is just this idea of, you know, some of the adolescents coming up. That does seem to be kind of a new thing. I mean, there have always been amoral people, but mostly the serial killers and people that are pretty seriously disturbed. Now there just seem to be a lot of these young men who just really don't have much of a clue about anything. And I'm concerned because I have a daughter and I don't want her getting hurt.

Swent: Do you think it's different from the fears your mother felt?

Lyons: Oh, yes, sure. I think so. It wasn't as scary a world when I was a kid, I don't think. They are few and far between, but so many weird things have happened. Like this young girl up in Lakeport, who was murdered by this guy. She was fourteen. Came from a real well-known, upstanding family. She got mixed up with this psychopath. He lured her to a barn and he and his two friends clubbed her to death. This was just a couple of years ago. And they found her on the road, in the trunk of a car. They caught the guys. He was the son, the illegitimate son of a boy I went to high school with, who was a rebel and a motorcycle rider. He was the boyfriend of the girl that brought the drugs up [laughing] from San Jose. We loved him. Roy. He was such a sweet guy, but he was a rebel. We thought he was a nice guy. We thought he was great, but he went awry. I think he's in prison now. This kid was his son.

So it kind of ties in--you can see--and I'm not one of these people who say, "Oh, the sixties are what destroyed us," because I'm a strong--I loved the--well, for me it was the seventies. I thought a lot of good came out of that period, a lot of women's issues and equal rights and civil rights. I think a lot of really good stuff came out of that time. But there is something to say about this; some pretty negative stuff came out of it, too. You know, "It's okay, anybody can have a baby any time they want, and

never mind about the baby, what kind of upbringing it's going to have." I guess that's what Roy did. His son was a vicious psychopath.

So now should we leave on that note? [laughing] Let's talk about something positive. Oh, see, the daffodils are blooming.

Swent: Your golden lab is happy out there.

Lyons: Yes, a beautiful, sunny, cool day on beautiful Clear Lake. And things are going to get better.

Swent: Well, you're certainly doing a lot of wonderful community things to make it better. I must say, I'm impressed at all you're doing.

Lyons: Thank you. It gets to be a little much sometimes, but I'm not going to--

Swent: Well, I think a lot of people--of course, I've lived most of my life in places even smaller than this, and I think a lot of people underestimate how demanding life can be in a small community. I mean, if you really care about it and are an active person at all, you can be just run ragged doing all the kinds of things that you're doing. It takes a lot of work to keep a community going.

Lyons: Yes, it does. But fortunately--

Swent: But it's also very satisfying, isn't it?

Lyons: Yes. And I'm lucky that I only work two days a week. My husband is really good about things. He's very supportive of everything I do, so that's fine. My daughter gets a little fed up every once in a while, but I take her to Audubon meetings.

Swent: You're a role model for her.

Lyons: She goes to Audubon and lies on the floor with her pillow and blanket and watches the slide show.

Swent: So she'll grow up to be a good citizen. You don't need to worry about her.

Lyons: Yes, I hope so. Okay, well, it was nice talking to you.

Swent: I've certainly enjoyed this. Thank you.

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6.10 SOCIOECONOMICS AND LAND USE

The purpose of a socioeconomic impact assessment is to identify the kinds of economic and social changes generated by mining and milling development activities that would not otherwise occur as rapidly in the impact area or even occur at all. Any socioeconomic assessment must consider both benefits and disbenefits of the proposed project which can be generalized as follows:

Benefits

- Increased employment opportunity.
- Significant economic contributions to the local economy through payroll and purchases.
- Increased tax revenues to local, state, and federal government.

- Provision of job training for the unemployed.
- Creation of demand for transient accommodations during off-season months (during the construction period).
- Increased employment opportunities for young people who might otherwise leave the area.
- Improvements in the transportation, electrical, and telephone services to the Morgan Valley Road area.

Detriments

- Creation of additional burdens on community services and facilities.
- Interference with existing slower-paced life-styles in a predominantly retirement area in a rural setting.
- Increased traffic congestion with accompanying noise and safety hazards.
- Creation of possible conflicts/stresses between local residents and immigrants.
- Loss of grazing land.

A detailed socioeconomic impact assessment was prepared by Dames and Moore for Homestake. The following summarizes the major results and findings.

6.10.1 Land Use Impacts

Land use impacts will be confined primarily to on-site lands directly associated with the development of the McLaughlin Project. It is anticipated that little, if any, development will occur off-site in association with needs for housing or public services and facilities to support the modest projected population growth. Therefore, land use impacts outside of the immediate project area in Lake, Napa, or Yolo Counties are considered to be negligible. The project itself is expected to disturb a total of 1,613 acres of which 1,351 acres are expected to be reclaimed following cessation of operations.

D'APPOLONI

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6.10.2 Employment and Population Impacts

The construction work force will consist of a maximum of 57 workers during the first four months of site preparation and will peak at 441 workers during month 13 and then steadily decline to month 27. The composition of the construction work force is predicted to be as follows:

o Local daily commuters	221
o Nonlocal weekly commuters	154
o Nonlocal relocating workers	66
TOTAL	441

Ninety percent of the nonlocal relocating construction workers (59) are expected to reside in Lake County. The total population increase in Lake County during the construction period is expected to be 198 persons, 155 as a result of direct labor, and 43 as a result of secondary service oriented jobs. The population increase due to direct employment during peak construction represents only about 2.5 percent of Lake County's projected population growth between 1980 and 1986.

After full operation is achieved, the peak permanent work force at the mine and mill will vary slightly from 233 to 245. Virtually all of the permanent employees are expected to reside in Lake County which will also experience almost all of the attendent population increase. A breakdown of the permanent work force is expected to be: 60 percent from existing Lake County residents and 40 percent from in-migrants. The total population increase, from both direct and secondary employment, is projected at 271 or about 3.4 percent of the projected growth for Lake County between 1980 and 1986. The total number of jobs to be provided by the project, both direct and indirect, is projected at 316.

6.10.3 Housing Impacts

Lake County, which would absorb almost all of the housing impacts during both construction and operation, had 1,166 permanent housing units for sale or rent in 1980 which represented a vacancy rate of 5.7 percent.

Year-round vacancy for all units (including transient units) was 25 percent. Total demand for housing during the construction phase will be 207 units--136 units for weekly commuters, 57 units for relocating workers, and 14 units for indirect job holders who are permanently relocating. This demand represents only 18 percent of the permanent housing units available in Lake County in 1980. However, 50 percent of the demand for additional housing is expected to be filled by mobile homes even though permanent units are available. As weekly commuters will have a tendency to live in mobile homes or other temporary accommodations, this may place a strain on tourist accommodations during the summer months when these types of accommodations are now almost 100 percent occupied. The temporary benefit of the project will be the creation of a demand and thus the reduction of vacancy rates of transient accommodations during the off-season months.

The total housing demand during the operation phase is estimated at 83 units, 25 of which are expected to be satisfied by mobile homes. This demand represents only 7 percent of the 1980 Lake County housing vacancy rate. However, it is projected that 80 percent of in-migrant employees needing new housing units will settle in Clear Lake and the area between Lower Lake and Middletown. Thus a significant housing demand pressure could be felt in these localities. Also, additional housing units will be required almost all at once--43 units in the first year, 38 units during the second year, and only two units during the period of peak employment which will be achieved in 1991. It is expected that demand for new or expanded mobile home parks will occur in the Clearlake/Lower Lake/Middletown area.

6.10.4 Traffic and Circulation Impacts

The construction phase of the project will generate a peak hour traffic volume of 401 vehicles, assuming an occupancy rate of 1.1 persons per vehicle during the period of peak construction employment. Although this traffic load will be distributed over a wide area throughout the three counties and as far away as San Francisco and Sacramento (for

weekly commuters), all traffic will converge on a company parking lot somewhere in the Clear Lake area. Workers will be bused from the parking lot to the project site. The peak hour traffic generated during construction will result in increases in traffic volume on three major routes: a 10 percent increase on Route 53, north; a 13 percent increase on Route 29, east; and a 15 percent increase on Route 29, south (Figure 3-1). Assuming ten project commuter buses traveling on Morgan Valley Road and ten smaller vehicles moving to project site destinations, the morning hour traffic east of downtown Lower Lake will be increased by about 40 percent over 1982 traffic counts. This figure is based on a traffic count of 50 vehicles for the hour of 0752 to 0852. Evening traffic will be increased by much less, about 18 percent, based on a traffic count of 110 vehicles for the hour of 1502 to 1602.

Peak traffic loads during the operations phase will be significantly less than during construction due to the fact that workers will be divided into three shifts consisting of: a day shift with 145 people, a swing shift with 46 workers, and a midnight shift with 43 workers. Assuming a vehicle occupancy rate of 1.1 persons per vehicle, the 145 day shift employees will generate a peak hour volume of 132 vehicles. The distribution of these vehicles is expected to be as follows:

- o 50 percent (66 vehicles) on State Route 53, north
- o 30 percent (40 vehicles) on State Route 29 south
- o 20 percent (26 vehicles) on State Route 29, east

This represents an increase of 5 percent for Route 53, north; 2.4 percent for Route 29, south; and 4.6 percent for Route 29, east. This traffic will converge on the company parking lot somewhere in the Clear Lake area, the point of bus departure. Assuming three bus loads and ten smaller vehicles are needed to carry the day shift to work, project operations commuter traffic will increase the peak hour traffic east of downtown Lower Lake by about 26 percent in the morning and by about 12 percent in the evening.

It should be noted that there will be traffic generated at off-peak hours by both the swing and midnight shifts. Although this traffic will not result in a significant increase in the area's total traffic volume, it will significantly increase the number of vehicles traveling the Morgan Valley Road during off-peak periods.

In addition to employee traffic, the operations phase of the project will generate considerble truck traffic associated with the transportation of chemicals, reagents, and other materials essential to the mining and milling activities. Points of origin for trucks will range from as near as Sacramento to as far away as Chicago. Based on a projection of 4,888 trucks per year traveling to the project site, it is expected that 13.5 trucks will be using regional highway systems and the Morgan Valley Road each of 362 days per year. This truck traffic will represent a 9.4 percent increase over current traffic volumes. Assuming truck traffic is concentrated during the weekdays, daily truck traffic would increase to 19.1 vehicles, or an increase of 13.1 percent over current traffic volume on the Morgan Valley Road.

Transportation of certain reagents used in the milling process, particularly sulfuric acid, hydrochloric acid, soda ash, and sodium cyanide, includes an element of risk due to the potentially hazardous nature of these and other chemical compounds. On the average, about three 25-ton trucks per day will be utilized in transporting these reagents to the project area. Considering the anticipated more than 20-year life of the project, there is a possibility of an accident involving one or several trucks. Even though the best available safety technology requirements of both federal and state regulatory authorities will be met, it is not possible to make the transportation of hazardous chemicals totally risk-free. The major social impact associated with trucks carrying chemicals and reagents is more likely to be irritating impacts of truck noise on those living or working close to the roadway than fear of truck accidents or chemical spills. (Noise impacts are addressed in Section 6.7.)

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Knoxville/McLaughlin Project

Roger Madsen

HOMESTAKE MECHANICAL ENGINEER

Interviews Conducted by
Eleanor Swent
in 1994

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Roger Madsen, April 1997.

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INTERVIEW HISTORY--Roger Madsen

Roger Madsen, mechanical engineer, worked for Homestake Mining Company first at the Homestake Mine in Lead, South Dakota, and then from 1958 at Homestake's uranium mines in the Ambrosia Lake district near Grants, New Mexico. When the McLaughlin Mine was being developed, he was called in as a consultant for the adaptation of an autoclave process which had been used for uranium ores in South Africa. There it was a batch process; Homestake wanted a continuous process. Crucial challenges were to pump a corrosive slurry and to contrive a let-down valve for the flow from the "pressure cooker". The process was successfully developed and has been widely copied.

The Madsens were our neighbors and good friends both in Lead and Grants from the time our children were toddlers and played together, so it was a personal pleasure to invite him in August 1994 to participate in the Knoxville District/McLaughlin Mine oral history project. Two interviews were held at my home in Piedmont on 18 and 19 November 1994.

Roger was born in 1923 in the iron mining area of Minnesota, the son of a master mechanic, and is a graduate of the University of Minnesota in mechanical engineering. He has the requisite technical training; in addition, he has native curiosity and enjoys learning something new. His common sense and good nature helped him to serve effectively in liaison with others during the construction and installation of the McLaughlin processing plant.

In his oral history he tells of his first job at Homestake in the shop where over three thousand drill steels were sharpened each day, something no longer done, but a training which he says was "of immense help afterward." He tells of designing a skip loader for the Section 32 Mine in Grants. "I was real pleased because that same skip loader, and all of its components after being rebult dozens of times, was still the same skip loader that I had designed the first time. That was the number one drawing for Homestake's operation down in Grants.... Eventually, I think, most of the mines in the area adopted the style that I had put in."

He recalls his early interest in computers, as well as his studies of thermodynamics, steam engines, and statistics, all of which he put to good use later on. He discusses the use of autoclave technology in the uranium mills at Grants, and how it differed from McLaughlin. He recalls the trips to South Africa, England, Germany, Austria, Holland, Finland, Spain, to investigate materials and equipment. He was often the one to ask a key question, such as, in one instance, What happens if it rains? He also tells of consideration for the safety of workers.

The tapes of the interviews were transcribed in the Regional Oral History Office and the lightly edited transcript was sent to Roger Madsen in July 1995 for review. He made several minor changes for clarification and returned the transcript in October 1995. The manuscript was corrected and indexed at our office. The tapes are deposited in The Bancroft Library and are available for study.

The Roger Madsen interview is one of more than forty interviews which were conducted by the Regional Oral History Office from 1993-1998 in order to document the development of the McLaughlin gold mine in the Knoxville District of Lake, Napa, and Yolo Counties, California, from 1978-1998, as part of the ongoing oral history series devoted to Western Mining in the Twentieth Century. The Regional Oral History Office was established in 1954 to record the lives of persons who have contributed significantly to the history of California and the West. The office is a division of The Bancroft Library and is under the direction of Willa K. Baum.

Eleanor Swent
Project Director, Research Interviewer/Editor

Regional Oral History Office
The Bancroft Library
University of California, Berkeley
February 1999

Regional Oral History Office
Room 486 The Bancroft Library

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BIOGRAPHICAL INFORMATION

(Please write clearly. Use black ink.)

Your full name ROGER A. MADSEN

Date of birth MAY 26, 1923 Birthplace HIBBING, MINNESOTA

Father's full name MARTIN MADSEN

Occupation MASTER MECHANIC Birthplace ROCHESTER, MINNESOTA

Mother's full name HELEN HOWATT MADSEN

Occupation TEACHER, HOUSEWIFE Birthplace WABASHA, COUNTY

Your spouse LAURA E (BETTY) BURNETT MADSEN

Occupation NURSE, HOUSEWIFE Birthplace ESCALON, CALIFORNIA

Your children JANET K, PATRICIA E., RUSSELL H., (CAROL, DECEASED)

Where did you grow up? NASHWAUK, MINNESOTA

Present community GRANTS, NEW MEXICO

Education BS MECHANICAL ENGINEERING
@ UNIV. OF MINNESOTA

Occupation(s) MECH. ENG.

Areas of expertise MINE HOISTS, PUMPS, COMPRESSORS, VENTILATION,
STEAM THERMODYNAMICS, SOME MILL MACHINERY

Other interests or activities GOLF, STOCK MARKET, HOME
CABINET SHOP WORK,

Organizations in which you are active (WAS ACTIVE KIWANIS CLUB)
ING COFFEE CLUB !

I EARLY YEARS AND EDUCATION, 1923-1948

[Interview 1: November 18, 1994] ##[1]

Growing Up in the Iron Mining Area Near Hibbing, Minnesota

Swent: Roger, let's begin by your telling where you were born and when.

Madsen: I was born in Hibbing, Minnesota, on May 26, 1923, in what at that time was North Hibbing and is now mostly the old Oliver Iron Mines there. All of the buildings are torn down, they are gone, and North Hibbing no longer exists.

Father, Martin Madsen, Master Mechanic

Swent: Was your father connected with the mines?

Madsen: My father worked in Nashwauk, Minnesota. My home at that time up through high school was in Nashwauk, Minnesota, about thirteen miles from Hibbing. My father worked for the International Harvester Company, which was part of the International Harvester Company at an open pit mine at Nashwauk. In those days you could walk to work in Nashwauk. He was the master mechanic there. I went through grade school, and high school, and--

Swent: Your father died when you were just a boy, though, didn't he?

Madsen: My father died when I was sixteen.

Swent: Was it a mine accident?

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[1]## This symbol indicates that a tape or a segment of a tape has begun or ended. A guide to the tapes follows the transcript.

Madsen: No, he had kidney failure. He was sick for almost nine months. That was a pretty trying period because my mother would get me up at two o'clock in the morning. My father would be in bed and he wanted to sit in the chair. Then I would go back to bed, she would get me up, he wanted out of the chair and back into bed. My oldest brother was at school at the University of Minnesota. I was a junior in high school at the time. After he died, my mother--we had been living in a company house--moved to another house in town.

Swent: How did the company handle things in those days? Did your mother get a pension or compensation?

Madsen: No, no. There weren't any benefits at all. Social security had just started at that time. I think my father had just paid in a few months.

World War II: "The Mines Were Busy, Busy, Busy"

Swent: When did he die? What year was it?

Madsen: 1940. Because of World War II, which everybody felt was coming, the mines in the area were busy, busy, busy. So the day after I graduated from high school I went to work on the track gang. That was hard work. Oh, my, that was hard.

Swent: What did that involve?

Madsen: In those days all of the work for the railroad--the open pit had locomotives that pulled four or five cars to what they called the concentration plant. People nowadays use the word concentration plant, but in those days they called it a washing plant. All of the track work was by hand. This was under the old school. I still remember eating lunch; along about lunch time you would watch the foreman of the track gang. When he picked up his lunch pail, you picked up yours. You finished eating before he did because when he put his lunch pail down, you were through eating, time to get back to work.

Swent: How much were you paid?

Madsen: That first year was 65¢ an hour. That was a lot of money then. Of course we gave--my two brothers and I--all three of us were working--we gave so much to my mother and that took care of all kinds of expenses.

Sixty-five Cents an Hour and No Benefits

Swent: Were there any benefits?

Madsen: No. I think at the time when my father died social security was just in and she got some social security from that, for herself. Then she was paid so much a month for each child that was eighteen years or younger, or else going to school, so my oldest brother Max was going to school down at the university and working the summer.

Swent: Was there company medical care?

Madsen: No, no. There were two doctors in town, and they made house calls.

Swent: But you did have a company house while your father was working?

Madsen: Yes, while my father was working.

Swent: But they didn't have a company doctor?

Madsen: Not a company doctor, as such. The company may have had a deal with them on the side, but not that I know of. One time I was in the bed and somehow I was playing with my mother's crochet needle, the one with a hook on it. I stuck it in my hand just like a fish hook, and of course it stuck there. She called him up, and he came down there and gave me a shot, cut my hand to remove the needle, and pasted it shut. Little things that you recall that you don't really need too much.

Working as Fireman on a Locomotive in the Pit

Swent: It is a big change from what it would be today.

Madsen: Yes. After school I went to junior college at Hibbing for one year and worked the next summer. I was a fireman on a locomotive there for awhile.

Swent: That's every boy's dream, isn't it?

Madsen: Are you kidding? It was hard work. These were locomotives you shoveled coal in by hand. You stand there and grab the shovel with one hand and the chain that opens the door with the other hand. You get a shovel full of coal, you open the door, throw the

coal in, not the shovel, close the door. Cold air going into those locomotive fire boxes is a no, no. You can have all kinds of boiler trouble if you don't--

Swent: I was thinking though, in the summer in Minnesota it is not all that cold.

Madsen: It wasn't all that bad. In northern Minnesota it didn't really get very hot. The thing that you didn't want to do and you got stuck with it every once in a while, when you were at the bottom of this pit you had to go around five times to get out of the pit and go for this washing plant, and you are shoveling coal all the time. The brakeman--there are three to a locomotive: the engineer, the brakeman, and the fireman--the brakeman gives one relief shot to the fireman for maybe half a circle around. It is the fireman that takes the brunt of that thing. Those things that you remember--

Swent: Developed some good muscles?

Madsen: The next year--there was an interval in there some place that I was working on this track gang and I was laid off. The next day I went to the other mining company and was put on, bang, just that quick, because at that time there were lots of jobs available. Then the company that laid me off--the employment manager came around to our house--and my mother couldn't stand the guy; he was from this old International Harvester outfit--he wanted to hire me back. My mother was so happy to tell him I already had a job. [laughing] Anyway, they shouldn't have laid us off under those circumstances, but they did.

I had another job, this was about 1942 now, another washing plant, a different company for the summer, in what they call a heavy density plant where they would separate the iron ore from the waste rock with heavy density media. The waste rock would float on the top and the heavy iron ore would sink. They call it the sink/float method, or whatever it was. I was the basement man in charge of seeing that the basement was kept clean, and added the new heavy density. Lot of mosquitoes in the summer time. My only defense was to take onion and mustard sandwiches to work.

Swent: That helped?

Madsen: Maybe it didn't help but I couldn't feel the mosquito bites.

A Draftee in the Army, 271st Engineering Battalion

Madsen: Then I went back to school and was drafted into the army, May of '43. I was in the Corps of Engineers, which for us was pick and shovel. I drove a jeep for a while.

Swent: You were an enlisted man?

Madsen: Helped to build some of the Bailey bridges.

Swent: You were an enlisted man in Europe?

Madsen: Yes, in France and Germany. We didn't get to France until after the Battle of the Bulge. We really didn't see very much action at all.

Swent: Which group were you with?

Madsen: It was the 271st Engineering Battalion with the 71st Infantry Division. That is on my discharge paper. I had an honorable discharge.

Swent: You were repairing bombed-out bridges?

Madsen: We built some Bailey bridges and went across the Rhine river on a pontoon bridge; we cleaned up roads. I can't think of all the other things. It was just all hard work.

Swent: Nothing high-tech?

Madsen: Hardly, no, not then. I think the worst part that I ever had over there was knowing we were going to go across a river that evening. It was a beautiful day, sun was gorgeous. We were laying on this hillside, no one was shooting at us or anything. It was so quiet. We knew what we were going to do, and nothing happened. We were in a big sweat, got down to the river, and we went across it. No big problem. We got shot at a few times, but nothing like most of the people I've talked to. Then, of course everybody was discharged from the army. The day I was to be discharged, I had pneumonia and I stayed in the army for another thirty days on account of that.

Swent: Where were you?

Madsen: At Camp LaCrosse in Wisconsin.

Swent: Oh, right near home.

Madsen: Across the bridge from Minnesota. It was the first time I had been there.

Swent: When was this, then?

Madsen: I was drafted in '43. I got out in '46. I was in the army almost a year after the war ended.

Swent: You stayed over in Germany.

Madsen: Yes, probably because there wasn't enough transportation to get a million guys back from over-seas, or however many were over there.

Swent: Was it sort of interesting?

Madsen: You just did things to kill time, that was about all. I was on detached service at division headquarters as an electrician. After the war ended we were in Augsburg.

Swent: Oh, that is kind of pretty country.

Madsen: The historic sights weren't there for us. All that you saw was bombed-out buildings and displaced persons and things like that.

Swent: You weren't thinking about Mozart.

Madsen: Hardly. There might have been something like that going on someplace, but I sure didn't know about it. Anyway, after I got out of the army I went back to the University of Minnesota.

Return to Mechanical Engineering Studies at the University of Minnesota

Swent: Had you been studying engineering before?

Madsen: Yes. One year at Hibbing and the next year, up until 1943 in May. I was three years and three days in the service.

Swent: You had studied one year at Hibbing and--

Madsen: And one year at the University of Minnesota until I got drafted out of school. Then I went back to Minnesota.

Swent: You were clear that you wanted mechanical engineering all along?

Madsen: Yes, I knew that when I was still in high school. I wasn't much of a student in high school but I sure changed. As soon as I went to college it was just from dark to daylight. I changed my way of doing things. When I finished the university, the placement service had hundreds of places that were looking for mechanical engineers.

Swent: This would have been in '48?

Madsen: Yes. I interviewed at Procter and Gamble; they made me an offer. Their job was in Cleveland. I just didn't want to live in a big town. It didn't appeal to me at all.

My older brother Max had had a trip to Lead [South Dakota]. He was studying geology at the time. He had talked a little bit about the Homestake properties there. There was this ad on the bulletin board, on the placement board: "Who is interested? Write us a letter." So I did. I got a nice reply back, a paid trip to interview.

II WORKING AS A MECHANICAL ENGINEER FOR HOMESTAKE MINING COMPANY, LEAD, SOUTH DAKOTA, 1948-1957

A Junior Engineer's Job Training in the Shops

Madsen: I wound up being interviewed by Harlan Walker and Joe Gerrans, who was the chief mechanical engineer at the time.

Swent: Walker was the assistant manager?

Madsen: Yes, the assistant manager.

Madsen: Gerrans was a Cousin Jack [Cornish]. They offered me the job then and there and I accepted.

Swent: How much did they pay you, do you remember?

Madsen: When I started there I was to work at an hourly rate for a whole year in different groups. I think the initial pay was $1.04 an hour. There were frequent 4¢-an-hour raises for a long time after that, at least through that year. I started working for Homestake on April 1, 1948. I had this interview about Christmas time when I had some time off from school.

Now I got up to Lead. The first job, I had my safety shoes and my own safety glasses, at that time. They gave me a hat. We didn't have to wear safety hats in those days, not initially, but we had to wear safety shoes.

I went down to the old drill sharpening shop. This is when they were sharpening something over three thousand drill steels a day. There were about thirty, thirty-five fellows working in this drill sharpening shop. There were no separate bits then. The end of the drill steel was sharpened, heated in the forge, upset--I don't know what the proper word is--to form the bit at the end of the drill steel. Then the drill steel was heat treated and put on cars where the locomotive would take them back to the mines.

Swent: What was your job?

Madsen: I did something of everything in that shop. This was my training period. It was of immense help afterwards. After the drill sharpening shop, I went to the pattern shop. Do you know what a pattern shop is, for foundry work?

Swent: I happened to visit the pattern shop last summer.

Madsen: Okay, so you know what a pattern shop is.

Swent: Anyway, you should say it for the record what the pattern shop was.

Madsen: They make the wooden forms that are used in the foundry to make impressions in the sand where the molten iron is poured, and then you come out with a casting.

Swent: First you make a wooden form and then they make the casting.

Madsen: A skilled pattern shop man is a real craftsman, and they had several of them. I worked in the foundry, I worked in the blacksmith shop, I worked in the machine shop.

Swent: The blacksmith shop--most people think of that as making horse shoes.

Madsen: They called it the blacksmith shop but it was really a steel fabrication shop. There was some actual blacksmith shop work done there but very little.

Swent: What did you do?

Madsen: I was educated. I worked with the fellow that ran the steam hammer. I wasn't much of a--sometimes they had to use eight-pound hammers and pound on this red-hot iron. Somebody is holding a hammer that you hit with your hammer to form whatever they were forming. They gave that eight-pound hammer to me. I hit a couple of blows, then I missed. They looked at me--

Swent: You didn't hit him, I hope.

Madsen: No, I didn't, but they didn't trust me much after that. I didn't trust myself either. You get a healthy respect for somebody who can swing that eight-pound hammer for hours on end without getting exhausted. It didn't take very much to get me exhausted.

I went over to the steel fabrication shop where they make things from steel plate and various steel shapes. They repaired

the mine cars there. Then I went to the machine shop and operated several of the different machines like the drill press and lathe. I worked with the outside crews that worked out of the machine shop repairing machinery. Then I worked in the locomotive repair, the mine locomotive repair. They had the old compressed-air locomotives.

Then I went with the outside crews. August Hett was foreman of one of the crews that I worked with. The other foreman--everybody called him Gusty, but his real name was Harold Gustafson. August and his crew took care of the hoists and the big compressors, seven big compressors that they had in the Ross and Yates main compressor plants and the steam turbines when Homestake was still operating their own power generation plant at Kirk.

Working in the Drafting Room

Madsen: Then what happened? Then I went up into the drafting room, making drawings and things like this. I was up in Lead doing this type of work.

I think it was June of 1957, I went down to Grants [New Mexico] and started to do things down there.

Swent: This was the first time you went down there?

Madsen: Yes. I designed a skip loader for the Section 32 mine. I was real pleased because that same skip loader and all of its components, after being rebuilt dozens of times, was still the same skip loader that I had designed the first time. That was the number one drawing for Homestake's operation down in Grants.

Marrying Laura Elizabeth Burnett, 1950

Swent: When did you and Betty get married? You met each other in Lead?

Madsen: Yes. We got married in August of 1950, on payday. We couldn't have gotten married otherwise.

Swent: She was working as a nurse?

Madsen: She was a nurse at the Homestake hospital. She had graduated from the University of California at Berkeley.

Swent: UCSF, I guess, they call it now.

Madsen: Yes. She worked at public health services. She worked at Yosemite and I think several other places, I can't recall. Then she came to Lead and that is where we met, up there. Then we had three children. We had four; our daughter Carol died. That was pretty much of a thing--it was years before I could talk about Carol. We now have seven grandsons, no granddaughters, but we do have the two girls and our son, and their children.

Swent: When you first started on the skip loader design, you were just sent down there. You were still living in Lead?

Madsen: I told my boss at the time--

Swent: Who was?

Madsen: LeRoy Seyhers was the boss at the time. I told him that I was very much interested in going down to Grants.

III WORKING FOR HOMESTAKE'S URANIUM OPERATIONS, GRANTS, NEW MEXICO, 1958-1976

Drawing Number One: A Successful Special Skip Loader

Swent: Several people were moving down there at that time. In fact, we had just moved down there.

Madsen: It sounded like a real interesting spot. I thought, "I'm pretty stale up here," then the Grants deal was arranged and I went down there. I made the drawing of that skip loader and I looked at it --this was the very first drawing. I looked at this, the general drawing, and I said, "This is no good." I tore it all up. I had worked on it for five days, and then started all over. The first drawing was actually scrapped and the second drawing became the first drawing.

Swent: This wasn't something you could just buy off the rack?

Madsen: No, no. All of these types of things were designed. Eventually, I think, most of the mines in the area adopted that style that I had put in.

Swent: What was special about it?

Madsen: The slope was fifty-seven degrees. This is an odd-ball slope of the bottom of the skip loader. I had this choice because the spacing of timber--a forty-five degree slope isn't enough for sticky ore to slide down on. I would have preferred sixty degrees, but it got too long and too awkward because of the tilt. It is a complicated thing. No use of talking about too much of that.

Swent: That is interesting.

Madsen: I remember that it was 57 degrees, and I thought, well--and you had no calculators in those days; you had to multiply all these

things out. You had to have it factored to the thirty-second of an inch. We had tables then that you could look up values without doing the actual calculation.

##

Swent: Perhaps you should explain what a skip loader is.

Madsen: In the underground mines, the miner mines the ore, loads the train, and the train takes it over to the shaft. The shaft has an ore pocket in it. To get the ore from the ore pocket onto the surface, you have to somehow get the ore to the skip--to the hoisting bucket. The skip loader is the device for doing this. I don't know how else to say that.

Swent: It is a machine? No.

Madsen: No, it is not a machine, it has an air cylinder on it, but with gates. It is a--

Swent: Why can't you just have your ore train dumped into the skip?

Madsen: Too slow; then you would hold up the skip or you hold up the ore train. The ore train can come and dump at any time into the skip pocket. The skip can keep going up and down with this transfer device. From the ore pocket into the skip is by use of the skip loader; it measures the amount of ore that is put into the skip by opening and closing gates. You manage to do this. Some of the bigger skip loaders, the kind that they use up in Lead, in the big mines, have two gates in them. The measuring device was in between the two gates. When you open the upper gate you fill the skip loader and then you close the upper gate and then when the skip was there you open the lower gate and the ore slides into the skip. The skip loaders that we have in Grants--the scraping device would take ore from the ore pocket over the top of the measuring capsule, smooth it off. Much like you use a teaspoon and smooth it off and then dump it. The dumping occurred when you opened the air cylinder--the gate.

Swent: And I suppose the complication there would be the texture of the ore; it was wet?

Madsen: If it was wet it would stick in the chute. Of course, all these parts wear, so you have to design it so that parts can be taken out and replaced with new parts--a very important part. And that is what makes the drawing so involved. You can't just weld the whole thing together. You have to take these things down in very small pieces and bolt them together. It worked out pretty good.

The people that built that skip loader were in Albuquerque, and they had never built one of these things before. They put it all together, completely together, in Albuquerque. I walked into that shop and here they had the whole thing all together for an inspection. No other shop in the country would have it done that way. They just build the pieces and ship them out.

Swent: So, did you have to undo it, take it apart to get it out there?

Madsen: Yes, unbolt it. It was an all bolted assembly. The people that built it later moved to Grants; Bud Dawson and Frank Hackney had the shop there in Grants for awhile. Later on Frank Hackney took over the whole thing.

Swent: Had you selected them to do this work?

Madsen: Yes. In those days I was making a drawing a day. I was checking it myself. When I had enough of whatever I was going to work on, then I would send out for quotes, or simply order if it was not too much money involved. You had nobody overseeing you. You had nobody checking you. You were the purchasing agent, the designer, the checker, and the receiver.

Swent: And the construction supervisor?

[When reviewing the transcript, Madsen added this note: "Madsen's hearing is not all that great."]

Madsen: Somebody else had to pay for it.

Swent: You had to supervise the installations too?

Madsen: No, I didn't have to do that, except to see that the fellows had the right drawings and they understood. Anyway, it installed very nicely. That was about all I did for Section 32, but I did skip loaders for Homestake mines Section 15, 23, and 25. I designed the pump stations for Section 23 and Section 25. Section 15 was pretty much of a dry mine. There wasn't really a pump station there.

Swent: When did you actually move to Grants? I have forgotten.

Madsen: January 1, 1958.

Swent: Right after Christmas.

Madsen: Right, we arrived there and our daughter Carol was with us. She had a seizure the day we arrived in Grants. That was--[pause]

Swent: A bad time. You didn't have a very good first experience in Grants.

Madsen: Difficult.

Shopping for Second-Hand Hoists in Alaska and California

Madsen: Then prior to making the designs for those hoists at 23 and 25, their pump stations and other designs, I made a trip up to Alaska to look at a hoist up there. That hoist was a lousy hoist. It was way back in that Alaska Juneau mine. I think Langan Swent and Don Delicate were pretty disappointed when I sent back that I didn't think that it was a very good hoist. I turned around and went to the California Empire Star Mine. I think it is--

Swent: It is Grass Valley.

Madsen: Yes. Homestake wound up buying two hoists there. One went in Section 25 and one went in Section 15. The hoist for Section 23 was already there. The people who sold their interest to Homestake--or however that was involved--had already bought this old hoist and two headframes.

Studying Mine Ventilation

Madsen: Then I got involved in all kinds of mine ventilation problems. I had made quite a study of mine ventilation on my own, and figured out a system for calculating these things. And this was in the days before computers. It was very tricky.

Swent: Calculating air flows and things like that?

Madsen: Yes, well, that is another story. Very little to do with steam at that time, though I had had quite a bit of training at the university on thermodynamics. I think three or four five-credit courses on thermodynamics and steam, steam boilers and steam turbines, and this type of thing. While I was in Germany after the war, one of the things I did was take a correspondence school course in steam engines. That was why I was interested in your talking about that vertical dewatering shaft steam engine. What was that?

Swent: The Cornish pump.

Madsen: Yes. Anyway, I didn't study anything about Cornish pumps. It was mostly about the valves and valve setting and things like that. I did a lot of studying for mine pumps at Section 25 and found out that the pipeline was too small.

Improving the Pumping System at the Section 25 Mine

Swent: What pipe was this?

Madsen: From the pumps to the surface. They had an eight-inch pipe line that the contractors had put in. I did some calculations and looked at that and I said, "Oh, boy." There was a system where you use pump curves, the characteristic curves of the pumps and the system curves for the resistance to the pipelines. I looked at that and I said, "Uh oh," and I went to Delicate and I said "Don, we need to put in a ten-inch pipeline."

We had three pumps underground and every once in a while all three of these were running just to keep even. If you lost one pump then you don't have enough pumping capacity.

Swent: So you had to put in a bigger pipe?

Madsen: It was my recommendation that they put in a bigger pipeline, a ten-inch pipeline.

Swent: That would have been horribly expensive, I would suppose.

Madsen: Not expensive but real awkward because you don't have much room to work in the shaft. I explained very carefully why. Don and his crew went ahead and put in the ten-inch pipeline. They got it in and put it into operation. And one pump took care of everything in only half of the time. It was that big of a change in the system.

Swent: So that was sort of a feather in your cap.

Madsen: That was one of the feathers. I don't like to talk about the lack of feathers.

Swent: Don't be modest. This is no time for modesty.

Madsen: These type of things kept working. I did different jobs down at the Homestake mill after one of the mill superintendents left. [tape break]

Improving Operations at the Mill

Swent: We are continuing now after a little break. You were saying that one of the mill superintendents left.

Madsen: This was at the Homestake operations in Grants. After this particular mill superintendent left, I became more involved in the operations and change-over of equipment there. We improved the operations considerably.

Swent: Was there a major change?

Madsen: Yes; the initial design had a conveyor belt on the last bank of drum filters and this was a horrible mess. The conveyor belt was too small. It was located poorly and had material on it that really isn't designed for conveyor belts. We took the conveyor belt out and put in chutes and troughs and water sprays and things like that to convey the final slurry from the last bank of filters to the tailing pond by use of special pumps.

Swent: Was this the first time that you got involved with the mill?

Madsen: Essentially, yes, because practically all my work at that time had been for the mine. Now the mines had pretty much ironed themselves out and all looked pretty good. The mill was having lots of problems, and I guess fortunately for me these changes were made and I was able to get involved, not by myself, but the whole group of people.

Swent: There were two Homestake mills there.

Madsen: Yes. Most of the work that I was doing at that time involved the bigger mill. It was having far more problems than the little mill was. There were a lot of small problems that we resolved. Whenever you are operating, it is like owning a car, you are forever fixing it and making changes, and this type of thing. This kept going on for a long time.

I did a lot of studying on formal statistics. I had gone to a computer conference up in Golden [Colorado].

Getting in on the Ground Floor with Computers

Swent: Computers were just coming in at that time.

Madsen: Yes, this was when a 4K machine was considered one of the biggest ones available. It was a monster, as big as a desk. I thought I would go up there and learn how to run one of these machines because I could see some things that I thought would be useful. I didn't learn anything about the machines. Every paper that was presented was on formal statistics as applied to the mining industry. It had to do with ore reserves and all of this stuff. I sat there while my jaw was hanging down. I didn't have the faintest idea of what they were talking about.

I went back to Homestake's operation in Grants. I got together with Jack Jones, the new mill superintendent. He said, "I had a course in formal statistics; let's get some books," so we did; we bought three books. One was a high-tech book, so I was lost after the first page, but one of the other books was something I could use. The more I studied the more I thought, "This has a lot of applications." So I did, I think I wound up with thirteen or fourteen books on statistics--but only applied statistics for things that I was doing.

Maintenance Problem Solving for a Rock Drill by Analyzing Statistics

Madsen: One of the minor things that I did--I got to studying on the rock drills used at the mine. I looked at the record of the parts used on the different drills--what they called side rods are a long bolt, two bolts on each rock drill. They are rather long and expensive. If they break you can't run the drill. I thought, "There must be something worth looking at." I made this formal study and it said to me, "Either there is something with the side rod or there is something wrong with the way we are doing this--using the side rod on the machine." I went out to the mine and sure enough, the side rods should have had a rounded edge on the head of the bolt as it was pulled down with the nut because the drill itself had a rounded surface that the head of this bolt would rest on. But they had a square corner instead, so when you tightened the bolt you stressed the head of the bolt something awful and it would pop off.

I took this to the--they call it drill doctor--that is the fellow that repairs the drill--the drill doctor. I said, "Look at this. Take it over to the grinder and round this off." The problem disappeared.

That was looking for these things without even seeing them ahead of time, just knowing from the formal statistics that there

was something wrong with this. I did this on some pumps and I did it on a couple of other things--same type of study. It was fascinating to me. It still is.

Now, this is many years later that these studies were done. The mines were all running pretty smooth and the mills were running pretty smooth--as smooth as they get, anyway.

Swent: There is always something.

Dewatering the Centennial Six Copper Mine in Michigan

Madsen: The uranium business was backing off. It had gone up and down, up and down. It was going down again. I began to do traveling around the country to different operations, up to the gold mine in Lead, up to the sawmill in Spearfish, up to Creede, Colorado.

Swent: That was silver, right?

Madsen: Yes. I went to the copper properties at the Calumet and Hecla mines. You do these mechanical things, studies, and some designs and things like that.

Swent: Calumet and Hecla is in northern Michigan?

Madsen: Yes. Homestake had an option on that property in cooperation with one of the bigger Canadian mining companies. I don't remember which one it was. It involved dewatering the mine. So this is my first trip up there and this is, I think, my first meeting with Henry Colen, at the Upper Peninsula of Michigan. I got there a day before they did. And this is in the winter time; three feet of snow up there is when there isn't much snow. [laughter]

I got into my hotel room and it is about twenty below zero. I am sitting there and I hear these fire sirens. It stopped like it was right at my front door at this hotel. I thought, "Oh, oh. There is something wrong." I looked into the street and there is this apartment house two houses away from this hotel, a big fire coming out of the window. I helped the fireman drag hoses around. I took it as long as I could but at twenty below and not dressed for that, I finally gave up and went back into the motel. I just took my shoes off and sat them beside the bed, covered myself up, and went to bed. I was going to get out of there in a hurry if I had to.

It turns out that the Calumet and Hecla Centennial Six mine was full of water. Geologists at that time believed that by going deeper in the mine they would be able to improve the pounds of copper per ton of ore or whatever it was, and it was worth looking at. The mine had to be dewatered first. That was one of the things I was looking at.

This shaft is--I even forget how deep it was--several thousand feet, anyway. I thought, we don't need to pump this thing out. We can dewater it with the skips, bail it out. These are big skips, a three-thousand-horsepower hoist and eighteen-ton skips.

Swent: And they were already there?

Madsen: They were there. You could run them anytime you pushed the right buttons. We went through this; everybody said, "Hey, great." So, off they went. I didn't recommend putting the trapdoor in the bottom, but they did later, so the skip would go down, fill up with water, go up, dump the water on the surface, just splashing all over the place. In the winter time there were big icicles everywhere.

My oldest brother is working for Cleveland-Cliffs in Ishpeming which is not too far away from this place. These T.V. crews had taken pictures of the water being dumped on the surface. Everybody was saying, "What is the matter with those people? Don't they know what pumps are for?" It was foolish to put pumps in there. I had a horrible time explaining that to them, why we went and did the bailing out with the skips. It is hardly ever done. It worked fine. I didn't stay there. I just did a few days that trip. The fellows that were doing this actually improved the way to do it and had very little trouble on this whole dewatering operation. The only one who had to work hard was the hoistman. That was non-stop for him. Over and over and over again.

That was another job. Later I went back and got involved in the system for using what they call a Cryderman mucker to be used for--I use the word mucking; I don't know any other word that fits. At the bottom of the shaft, they drill and blast and muck the ore, put it in the skip and hoist it out. The fellow that had worked for--I think it was Calumet and Hecla--at least he had worked in that area--told me later that this is the only shaft in the Upper Peninsula that wasn't mucked by hand. We made the Cryderman work. I had designed a system for using the Cryderman. There were two skips in balance. You had to shift the Cryderman back and forth so that one skip could be loaded and then you shift the Cryderman again to get the other skip. Once again, the

fellows that were there improved the Cryderman system. No matter what I designed, or worked on, somebody could make it better, or I could make somebody else's better. That stuff never ends.

IV THE MCLAUGHLIN PROJECT: DESIGNING SLURRY PUMPS AND A LET-DOWN VALVE FOR A CONTINUOUS AUTOCLAVE SYSTEM

The Challenge of Refractory Ore and Environmental Protection

Madsen: From 1976 on, I was project engineer for Homestake at various locations. Then I remember flying back from the [Spearfish] sawmill on one trip. I got tired of getting into Albuquerque at ten o'clock at night and driving to Grants and I would stay in a motel. When I got into the motel I would turn the television on; the last thing I heard on the news was Homestake's McLaughlin project looks very good. Then they started talking about it. I didn't know what they were talking about. I hadn't heard word one about McLaughlin.

Then I had business with a stockbroker the next day. He knew I worked for Homestake. He said, "Why didn't you tell me! We could have made a killing!" I pretended I knew what it was all about. I told him I didn't want to go to jail. But I didn't know anything about it and I hadn't bought any Homestake stock either. That was my first word about the McLaughlin project. Then of course there were all kinds of news stories about it everywhere. Gradually we heard a little bit about it. Then several months later when they were still doing their exploration work--

Swent: This might have been in '79.

Madsen: I don't remember what year it was. It was when they were still doing drilling for the exploration holes, and they had got enough samples to do testing.

Swent: Could have been in 1978.

Madsen: Anyway, they had to either roast the ore, or process it some other way in order to get enough recovery of the gold. Conventional cyanide milling, I guess, would be able to get 60 percent or 65 percent. It was a pretty low figure. Obviously they felt they

could do better, so roasting was one thing. Then one of the metallurgical guys said, "Well, we could autoclave it."

Swent: Who was that, do you know?

Madsen: I am not too sure which one advised that. There were too many involved in it. It was probably the consensus of all.

A Similar Situation with Uranium Ore

Swent: Were you asked to be in that by then?

Madsen: No, not yet. The Homestake mill in Grants has autoclaves. They had a lot of trouble with the autoclave on what they call the let-down, let-down valve.

Swent: What were they autoclaving there?

Madsen: The uranium ore.

Swent: All of the ore?

Madsen: For the big mill it went through autoclaves.

Swent: Right from the beginning?

Madsen: Yes, at the beginning.

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Swent: We were just beginning to talk about the fact that there were autoclaves that you worked with in Grants.

Madsen: The treatment of the ore consisted of grinding the ore in ball mills and mixing it with a chemical slurry and getting it to the right consistency and putting it into autoclaves where air and heat would increase the rate at which the uranium would go into solution. If you could operate the autoclave at high enough temperature--other people would say pressure but I keep using the word temperature for thermodynamic reasons--when they would get the temperature up about 230 or 240 degrees, this is above the boiling point. At Grants where the elevation is something over six thousand feet, the boiling temperatures are close to 200 degrees Fahrenheit. When you have the slurry coming out of the autoclave, or a series of autoclaves, someplace there has to be a pipeline and usually a valve of some kind where the slurry goes

through the valve into a zone of much lower pressure. In the process of doing that a small percentage of the liquid, usually water, will flash to steam, increasing the volume tremendously. When that happens, the velocity of the slurry going through the valve increases dramatically. Depending on how you calculate it you can approach the sonic velocity of the slurry going through the valve; for practical reasons you probably won't get too close to the sonic velocity--a hundred feet a second would not be too far off. This is a very, very high velocity that literally cuts things.

Anyway the mill in Grants, because of the problems associated with that valve, did not operate at temperatures as high as desired. They wound up trying to use a light ceramic material that was made by Coors up in Golden. It wore out rather fast.

Swent: Where was this material, just in the valve?

Madsen: In the valve; at least one of them. It was a nozzle, actually. Anyway, that valve wore out rather fast at elevated temperatures. Now if you don't have the high temperature, you can have the pressure and flashing of steam would not occur. You would have high velocities but nowhere near what you would have when that liquid flashes to steam. That is the big problem.

A Continuous Explosion at 350 Degrees Fahrenheit

Madsen: I remember telling Dick Stoehr that is like a continuous explosion, just non-stop. What happened there in Grants was that they wound up running the autoclave close to 200 degrees Fahrenheit and maybe sixty-five or seventy pounds pressure. For what they were trying to do they were happy with it. They didn't have this horrendous problem with the valve. It was a problem but nevertheless they could live with it at that temperature.

Swent: Where did they get those autoclaves?

Madsen: They came with the mill. They were a different shape autoclaves than are used at McLaughlin.

Swent: Were they smaller, too?

Madsen: The autoclaves in Grants, as I recall, were about twelve feet in diameter; vertically, maybe ten feet, plus rounded ends on both ends.

At the uranium mill in Grants there were two autoclave circuits. There were eight autoclaves on each circuit, so there were sixteen of these things. They were connected in series but they were only operating at seventy pounds PSI max. They were designed for higher temperatures but due to the trouble with that valve they just couldn't live with it. However, the metallurgical guys made the compromise and operated at 200 degrees Fahrenheit temperature, or close to it. So when the McLaughlin and the metallurgical people started talking about autoclaves, I started making noises. I knew they wanted to operate at, I think it was 340 or 350 degrees Fahrenheit, whatever corresponded.

Swent: How did you hear about this; you were down in Grants?

Madsen: I don't remember how I heard about it, but this is the grapevine that comes floating through.

Swent: It is interesting, though; you just don't remember?

Madsen: I don't remember how I heard this--probably listening to John Parker talk or some of the metallurgical people. I would bump into the metallurgical guys on some of these other tours that I was making.

Swent: Who were the metallurgical guys? Do you remember that?

Madsen: John Turney was one of them.

Swent: He was working out of the Denver office, I thought.

Madsen: If I saw the name on paper I would know it, but if I have to recall it I am dead. Anyway, I kept making noises about it. I remember on one trip I was out at the San Francisco office, and Dick Stoehr was there and I got chit-chatting with him, talking about that. I said, "Well, Dick, you look at a steam boiler that is at the Kirk [South Dakota] power plant. It is an 80,000-pound-per-hour boiler. Sixty or eighty. Just think of blowing the safety valve and leaving it down all the time. This is the amount of steam that is coming through this let-down valve. But it isn't just steam. It's got these coarse particles--not fine particles, but coarse particles in it." Then I made this comment about this being like a continuous explosion. Nothing came of that at that time.

Working with Davy McKee, Construction Contractor

Madsen: Somehow or another I was asked to go out and see John Ransone and report to him because I had been reporting to [Rex] Guinivere and Guinivere said, "You report to Ransone." So I went out to say hello to John.

Swent: You had been assigned out here to McLaughlin by then?

Madsen: No, not yet.

Swent: Was Guinivere working in Grants?

Madsen: He was working in San Francisco. When they had this big change I first started out reporting to [William] Humphrey. Humphrey said, "You go to Guinivere." Guinivere said, "You go to Ransone." Anyway, I did leave them my number. I think it must have been John that called me, so I went out to Davy McKee. This was my first direct contact with the autoclave business.

Swent: Davy McKee had been selected by then to do this construction?

Madsen: They were in the process of trying to decide if they were going to do the design with Davy McKee. There was another Canadian company that was involved in some of the preliminary calculations.

Swent: It was still Davy McKee at that time?

Madsen: It was at Davy McKee's office.

Swent: But the company was called Davy McKee at that time?

Madsen: Yes.

Swent: Because they have changed their name, too. They are now Davy International.

Madsen: Yes, they were Davy McKee. Anyway, I get out there.

Swent: Do you have any idea when that was?

Madsen: No.

Swent: You can check it later, maybe.

Madsen: I doubt if I can. I might look at my expense reports because I saved most of those. I tried to find my own letters, reports that

I have written. I couldn't find them. The Homestake office is going to be demolished there in Grants. The whole thing is going.

Proving Competence with the Calculations

Madsen: Anyway, we arrived at the Davy McKee office in San Ramon. I was involved with a Davy McKee project elsewhere, across on the [San Francisco] Peninsula at one time. It wasn't Davy McKee then; it was McKee. That is another story.

When I got there and reported to John, John gave me a bunch of calculations that somebody had done on the autoclave and the let-down. He said, "This is what they are talking about." He didn't tell me anything to do or anything else.

I had my steam table books with me. I looked up and I did the calculations on what happens, how much liquid flashes to steam at various stages and what the heat balance was. I checked it, I organized it. I went back to John and I said, "John, they haven't included the heat associated with the sand. These numbers are strictly for the steam and liquid."

John said, "Oh," and off he went. After that, I was there. That initial thing made him understand that I understood that particular calculation. I am still making noises about this let-down--let-down valve is the best word to use--that I didn't know how to do this. I stayed longer and did a bunch of preliminary stuff for a while.

A European Trip to Check Slurry Pumps and Autoclaves

Madsen: We had a trip lined up to go to England, several places in Germany, and one in Austria, looking at slurry pumps for pumping liquid slurry long distances under high pressure, and for pumping the hot slurry into the autoclaves. And also we were looking at some autoclaves there.

Swent: Can you tell exactly where you did go?

Madsen: I can't quite remember, no. We went to this ceramic plant in England--I would need the letters or something to say where. There are several reports written on it. I looked for the letters and I couldn't find them. I probably could have saved them

someplace. I might still have them someplace. If I do, do you want to know?

Swent: Yes, it would be good to know exactly. These were places that were pumping hot slurry and some of them were also using autoclaves.

Madsen: Yes. Some were pumping coal slurry, checking on the pumps and doing different things with the slurry pumps. These were two separate things right now.

Swent: You were checking slurry pumps and also autoclaves?

Madsen: Yes, in different places. The slurry pump business was settled pretty fast. We knew which pump to get. That is the one that was finally bought for McLaughlin.

Swent: By then they must have decided that they were going to pump the slurry instead of processing at the mine.

Madsen: Yes, that is correct. This is a preliminary design. Locate the mine here, and the pumping station, preliminary grinding, and then you pump it rather than truck it. I didn't get involved in that part.

Swent: There had to be a decision also about where to put the processing plant.

Madsen: Yes. They had that part pretty well fixed. They wanted to know about what pump to use and if it was really available and could do this.

Swent: To get from point A to point B.

Madsen: Yes, it is not easy.

Swent: It was five miles or so.

Madsen: Something like that. Anyway they pumped coal slurry and had done this for years and years, but not the kind of abrasive slurry that is associated with the McLaughlin for that distance.

Swent: Coal is not abrasive?

Madsen: Not particularly abrasive; not from my viewpoint anyway. So the discussion came about autoclaves--my discussion with myself, I guess.

A Let-down Valve Problem with Cobalt Powder

Madsen: One autoclave that we looked at, we were looking at a cobalt powder, an extremely fine powder like rouge. You couldn't feel it. It was just the smoothest stuff you could put your fingers on. It was the precipitate in an autoclave. It had to go through this let-down valve system in order to make it a continuous process.

Swent: Who went on this trip with you?

Madsen: Roy Cellan was one of them and Joe Young was the other from Homestake. Anyway, the autoclave was producing this real fine precipitate powder. The fellow that was designing it had taken us to lunch. We got into a discussion and I asked him how long the valve lasted. It lasted two hours. It was a tungsten carbide material.

Swent: Was this in Germany?

Madsen: I think so--either Germany or Holland, one or the other. I am getting mixed up with all these places.

Swent: They had to change the valve every two hours?

Madsen: He solved his problem by some other means, I am not too sure what he did. Nevertheless, this extremely fine powder is in much gentler conditions than we are talking about for McLaughlin and the valve only lasted a couple of hours. It is a small valve. I forget what he said about how he solved his particular problem. Maybe he was still working on it.

An Autoclave on Rollers for Agitation

Madsen: We went to another place that had an autoclave that was on rollers. It was a long cylinder and it was on rollers. You had to agitate the slurry inside this autoclave. Instead of putting propellers on shafts they just rotated the thing, the whole autoclave. Here is a great big cylinder, maybe forty feet long and six-seven feet in diameter and they would put all of the ingredients in this autoclave and then heat it up and rotate it, do whatever metallurgical process they wanted. Then to solve the let-down problem they would stop the autoclave and let the material in it settle, so when they opened this pressure valve nothing was coming out but steam, clear, clean steam, which is no

problem, it didn't erode the valves at all. That's not what we're doing.

Swent: You didn't want to stop the process.

Madsen: No, no. McLaughlin is a continuous one. There was just no way that Homestake would consider a batch process. Fill it up, cook it, shut it down, bleed it off, start all over again. You lose the heat recovery. All that steam that is going out is gone. You just have to add that heat the next time to a batch process. That would be much too expensive. We looked at some other different kinds of pumps and things like that.

When we were flying back from Dusseldorf, we took a plane from Dusseldorf or one of those big airports, Frankfurt or--either one or the other. I am not sure which. I made too many trips in too short of a time to try to remember it all. We were flying back on a non-stop flight from Germany to San Francisco. I am writing my report. I get it practically all done, and it is practically a book. And Roy Cellan, who is the project coordinator, came back to my seat and said, "Can I see your report?" He took the report and went back to the seats where the Davy McKee guys were sitting. It didn't bother me; I didn't think any more about it.

When we get into San Francisco it is evening and I think the trip is over and I am going back to Grants. I had a flight from San Francisco back to Albuquerque that evening. Pretty soon I have my bags and have gone through customs. I call Betty and say, "I am here and on my way." She says, "Get a hold of Klaus Thiel. They want you to go to South Africa on Tuesday."

A Hurried Trip to South Africa to Look at Autoclaves

Madsen: While we were in Germany it was winter time. I had a terrible head cold and I was really hurting. My nose is running a truckload. This is Thursday and they want me to go on Tuesday, as I recall. I had to see Klaus Thiel because they needed my passport to get the visa to get into South Africa--finally made those arrangements. I flew back to Albuquerque, drove to Grants. The next day I went to Doctor Gutierrez and got all of the medicines I could carry. Back I go to San Francisco to catch the plane to go to New York. John Ransone, Andy Sass, Klaus Thiel, and John Turney were on that trip to South Africa. On the direct flight we fly to some island where the South African plane filled up with gas and got serviced and then took off again and landed in

Johannesburg. That island was a desolate looking place, I will tell you. South Africa still was on friendly terms with most of the countries, but they didn't have very many landing places. We wound up in Johannesburg.

A Memorable Luncheon Meeting at Vaal Reefs Mine

Madsen: We had a couple of people from different outfits meet us. Then we go to this meeting with the Vaal Reefs people and the general manager of Vaal Reefs. Vaal Reefs is a huge company. They showed us around some of their plants. The top general manager hosted a luncheon for us with people who were involved in the autoclave business. They had built an autoclave to process the gold ore to recover uranium. It was a place right close where we could go see this. They were running it at the time we were there. That lunch still sticks in my mind. I couldn't imagine--I wound up sitting next to the general manager. Here is this plate, and there are two wine glasses up here, there are forks over here, maybe three or four, two or three knives, and a couple of spoons up here. Of course, we have a nice drink ahead of time. The lunch started with a soup, very delicious. The waiters were coming out with white gloves, they did everything. There was wine that went with the soup and the salad. You drank wine with your soup and salad.

Swent: Was this at the mine itself?

Madsen: Yes, at the mine. It was built for this, to host visitors, I guess. Anyway, because Homestake had dealt with Vaal Reefs in the past, and Homestake had helped Vaal Reefs on their carbon-and-pulp process, Vaal Reefs was quite amenable at that time for contact with Homestake. That is my understanding of it. I don't know this for a fact, but that is what I understand. The dinner continued with fish, a nice big piece of fish, and that was just the start for a marvelous dinner.

Swent: That was just a start?

Madsen: Then here comes the main course. I am up to here, and all the time you are being served different wines. I was served one kind of wine in this glass, and one kind of wine in that glass. Now they were going to give me a third kind of wine. Those two glasses go but you get another glass. Then of course there was a dessert afterwards and cigars, but not a single one of us smoked in that whole room. The Davy McKee people were not invited to this particular lunch or to look at this thing. After all these drinks and things the discussion starts on different phases of

autoclaves. We were talking about the valves. I commented about them and the guy said, "We build our own."

I said, "Can we see one?"

A Completely Different Kind of Valve ##

Madsen: They had experimented with different forms and shapes of these things. They had designed their own valve. It was my understanding that they had solved their metallurgical problems in about three or four months. It took them five years to solve the mechanical problem, this valve. They showed us the valve and they explained what they did, the design of it and everything. It was completely different from anything I had ever seen before. The material in it was what you would use in a grinding wheel, only better. It was not as hard as diamond, but nevertheless comes pretty close to it. They had developed a process for making the valve. They had marvelous machine shops and things like that over there where they could do these things. From my viewpoint they had solved this problem. After that, "Hey, let's go home," but we didn't go home.

Back to Madrid and Germany for More Research

Madsen: From there we went back to Germany. I forget what we looked at. Then we went to Madrid--this is hard. It was the coldest, I think, it has ever been in Madrid. All the fountains had frozen, just nothing but ice. Once again, I wasn't feeling very good.

Swent: What were you looking at in Madrid?

Madsen: More talk about autoclaves. This small metallurgical firm had a testing autoclave that was maybe three feet in diameter and eight or nine feet long to do the metallurgical work, not the mechanical part, because they could afford to bleed the steam off. It wasn't designed for a continuous process. The metallurgical people were far more interested in that part of it. For me it was a nothing. I didn't know what they were talking about.

Not necessarily in the order that I am saying, we went to Helsinki and looked at more autoclaves up there at Outokumpu--some of the ways they were using to do the maintenance on them. We didn't get involved in their let-down system; maybe we should

have, but we didn't. We went back to Dusseldorf. I got sick again; this was after Madrid. I went down the tubes again in Madrid because of this real cold.

When we went from there to Germany, I stayed in that hotel room and the other guys went to a big German consulting outfit there. They had a nice long visit. Klaus Thiel was on this trip too. He said I should have been there because it was a much, much better visit than the first time that we stopped in.

A Formal Recommendation to Acquire Vaal Reefs Technology

Madsen: All of that and now we are going home again. And I am writing another report and very formally said that Homestake would benefit greatly by making some deal with Vaal Reefs and finding out how to build a valve. I believe that Vaal Reefs made the first valves that we used at McLaughlin. I don't know that. They are probably not doing it any more because some outfits in the United States, now I think, can make a valve that is very similar. That was one of my major contributions: "Don't get involved in five years of solving this valve problem." These are afterthoughts, but in my report, that first report after the trip to Europe, I had said maybe somebody else is doing this, but I don't know how to do it. I don't know how to solve this problem, and I didn't. The Vaal Reefs people did. Lo and behold Harry Conger winds up going out to make a deal with Vaal Reefs people. I think he went out there at least once. Did he say something to you about it?

Swent: I don't recall, but I know he has been there a number of times. In fact, I think he is on their board, isn't he?

Madsen: One way or another, Homestake made a deal with Vaal Reefs and then the metallurgical people--Kurt Carey spent several months in South Africa working out the metallurgical problems with oxygen, elevating temperatures and pressures, things like this, to try to optimize it with little test autoclaves for what is the best time, temperature, and things. That was the initial design part that I was not involved in.

Inspector on the Design and Construction

Madsen: Then after that was resolved and we said we could do this, then the actual deal was made with Davy McKee to do the design and

later on to supervise the construction. There were two separate phases. I was pretty well free to look at anything I wanted to. I was an inspector on the job. While the design was going on they were building this model of the plant. I would go in and look at that model--

Swent: That was here in San Ramon?

Madsen: Yes, that is where they made the thing. After accomplishing what they were doing, every once in a while I would make a comment and say, "How come?" and then change a few things.

A Big Decision: What Type of Autoclave and Whether to Enclose the Autoclave Building

Madsen: Okay, we're going to have autoclaves; this is the let-down system; what type of autoclave are we going to have? Understand, this is not in any particular sequence timewise. We had this big meeting with people who had designed an all-titanium autoclave and another one that would be steel with a brick lining in it. This meeting was to decide what type of autoclave was going to be used. The decision at that time was the steel one that was brick-lined. These autoclaves at that time were designed for outside, to be outside, no building over the top. I sort of shuddered at this because of things that I knew something about.

Swent: You shuddered at not having it enclosed?

Madsen: Yes. Fortunately the fellow from the German brick company that provided the bricks and expertise to put the brick lining in--he was giving a sales spiel about bricks and what you had to do, a lot of nice things about brick lining and things like that. When he got through I asked him, [facetiously] in all innocence, "What happens when it rains on this thing?"

He almost leaped out of his skin. "Rain on it! You can't do that!" Those aren't his exact words but I figured that was what his reaction would be. Then he went on to explain in a very detailed manner why you could not have a hot autoclave and wet the top of it, and not the bottom of it, and make it distort the shape ever so slightly, and then the bricks inside of it would come loose and you would have a horrible time.

After he got through I looked at Klaus Thiel's assistant. I looked at him straight across the table and I opened up my hands and without saying it I said, "See?" He is busy writing.

After the meeting we are out in the hall and Andy Sass comes over to me and says, "You know, you just added a million dollars to the cost of that autoclave right there." Well, if they didn't have what they needed it wouldn't have worked. They would have had nothing but trouble until they did do something about that. That would be a nasty problem because then you would have to put all new brick lining in it and everything else.

Swent: So what they did do was put it in a building?

Madsen: Yes, they put a building over it. I had lots to do with checking pipe sizes and going through steam calculations with these guys, but nothing about the metallurgical part of it.

Swent: Did you get involved in the construction phase also?

Madsen: Yes. I was there during all of the construction as an observer, a commenter.

Swent: Did they do everything on the site or did they do work away from there and take it in?

Madsen: Everything was fabricated off-site except for the dirt moving and pouring of concrete; everything on-site was--call it prefabricated--and then you just put it together like tinker toys. We put a big tinker toy together. [laughter]

Swent: More or less.

Madsen: There was a lot of welding on some of the tanks and things like that. When you do that the tank sheets are already rolled to the correct dimensions and size. All you do is hoist them up and weld them and this type of thing.

Swent: It must have been enormously complicated because you were getting things from lots and lots of different sources.

Madsen: Davy McKee had all kinds of people that kept track of who was shipping what and when it was to arrive and scheduling and this type of thing. I didn't have anything to do with that. I am sure there were other things I got involved in but those were the major things.

Swent: And it all worked pretty well, did it?

Madsen: Yes.

Swent: Did you have anything to do with the selection of the autoclave itself?

Madsen: No. I did some calculations to say that the minimum thickness was about two and three-eighths inches or something like that. When it finally came it was another quarter, a little bit thicker walls then I would have probably done. These type of calculations were made by the fabricators. They provide their own allowances for safety. There is a code in the American Society of Mechanical Engineers for pressure vessels. It goes into very, very fine detail about how thick the walls have to be and what type the welds are and how you inspect them and what the nozzles are and all this kind of thing, and how to calculate that. I didn't do any of that.

Swent: It is already decided for you, in a sense.

Madsen: Yes. So that is the major part of what I contributed.

Swent: Did you enjoy it?

Madsen: Yes, I did. I stayed there--I actually wound up taking this volunteer retirement and then working there a little bit as a consultant after that part. Then I wasn't doing anything so I said I might as well leave. I said, "I am going home now." And I went home.

Swent: Things have worked out pretty well. I guess the autoclaving has succeeded.

Solving an Ore Sampling Problem

Madsen: I went back for other things but they had nothing to do with the autoclave. It had something to do with that statistic that is on the ore sampling.

The mill people and the mine people had a big, fat argument going on about how much gold was being shipped to the mill. They couldn't agree. John Turney got Jack Thompson to call me and get me out there because John knew that I was interested in this type of thing, and maybe I am a neutral observer.

I get out there and the mill people had two sample methods. One used a smaller sample than the other. One was quick and dirty but it got reasonable answers for a small-size sample. The other sample was the kind that are extremely accurate, and these are small samples. I think I was involved in something over fourteen hundred samples, so I had a big sample lot to look at. When I did that study I found out that as far as the mine was concerned they

were putting "ship to the mill" or "hold" or "waste" in the right pile except for very few.

Swent: Those were the three categories.

Madsen: Yes. Two sampling methods are used--one a traditional fine assay sample and the other used some sort of electronic method of assaying a sample. The sample sizes are very small.

Swent: Like a spoonful?

Madsen: However they do it. Anyway, the sample that they used in the furnace was a bigger sample; it was the sample used for the run-of-the-day business. As I recall, the sample size that was bigger had to be more accurate, and it had to be more accurate simply because it was a bigger sample, no other reason. But there wasn't anything else wrong. I forget how I accounted for the difference between the mine and the mill, on how much gold was involved in this thing. And I never was invited back. [laughs] I insulted somebody, I am sure. That was my last trip to McLaughlin, on that statistic study.

Swent: So that was the end of being Solomon.

Madsen: Yes. I think you can shut your machine off. I don't know if I have anything else to say unless you have some more questions.

Swent: Do you have any other things that I didn't ask you that I should have?

Madsen: I might think of them later on. It would just be incidents that happened along the way.

Swent: That is okay. Can you think of some of the people that you were working with that you enjoyed or didn't enjoy?

Madsen: Inspecting. These are little things that really don't involve too much.

Improving Safety in Various Instances

Swent: That is all right. They are always important.

Madsen: I am looking at a beam connection--it was the shop building--and the size of the bolts that went into this beam connection. In my report I said that the connection isn't good enough. Somebody

went back, calculated the bolt, and said the shear strength is fine for the bolt. I said that is not what I am talking about. The thickness of the web on one of the beams where the bolt went through was only, I think, three sixteenths or an eighth of an inch, which rather surprised me for the size of the beam that it was. I said that there wasn't enough bearing strength in that. About two days later Roy Cellan came back to me and hits me with his elbow and he says, "You were right." That was one of them.

Swent: That was very important.

Madsen: It is small potatoes. The important thing is that we fixed it.

Swent: Yes, but you don't want your beams collapsing.

Madsen: No. Then there was--on the model--mercury furnaces to heat up all of the gold precipitate. They precipitated the gold onto stainless steel screens or mesh of some kind or another. Then they would put this mesh into a big oven and heat it up. I am going ahead of myself. I better be careful how I say this. At one part of the circuit there was mercury involved, associated with the gold. They had to drive off the mercury. They had two ovens that treated the gold slurry or sludge or whatever it was that they put in there--drove off the mercury, condensed it, and did something with it.

I was looking at the model one day and here is this pipe with a big valve on it going inside this room where the mercury ovens were and I said, "Somebody has to go in there and close this valve?"

"Yes."

"Oh, oh. Nobody can go in there. You can't go in there when the mercury ovens are running." Big groan from the guys that make the model because now they have to make corrections and it goes through a whole bunch of channels because you have to get the drawing corrected or whatever. These are small things but there were dozens of these types of things going on.

One time somebody spilled a barrel of diesel oil up there at the work site. I came along and here is all this diesel fuel all over the place. I had to get on the portable radio and everybody could hear me when I am talking on the radio; everyone has a radio. I said, "Hey, we have this big oil spill up here."

"Oh, yes. What about it?"

I said, "Nobody is cleaning it up."

"What!" In a few minutes they had somebody cleaning it up. Another case there was a Davy McKee guy working on a two-by-twelve board that is way out there in the middle, long--it is too weak. I get him to stop. Little things like this everyday.

Swent: You had the authority to do these things.

Madsen: No. All I had the authority to do was report it. I couldn't do anything. I had no authority to do anything at all except report what I see.

Swent: But when you saw something unsafe you had to--

Madsen: Yes. I never felt any antagonism from anybody. I wasn't threatening to anybody. Why don't you shut that off for awhile.

Swent: Okay.

Innovative High-Grading

[Interview 2: November 19, 1994]##

Swent: We were talking about various experiences that you had with people stealing--high grading, or stealing. I thought this was interesting because the usual definition--we think of people scooping up big gold nuggets and smuggling them out in their lunch buckets, but that is not the modern way to do it.

Madsen: There were two incidences. One I knew a little bit about. The other one I was told about. We will start with the one I was told about first. In one of my jobs I happened to run into a geologist from Lead; we were not in Lead at the time. We got to talking about this stealing gold nuggets. The fellow says, "Well, in this instance they weren't stealing gold." What they did was mine the waste rock as if it were high grade gold ore. They did this by upgrading the sample that was sent to the assay office. When they are exploring in the big open stope about what to mine they would drill, say, vertical holes into the rock. If it happened to be all waste rock, the miners are not that ignorant about where the gold is. They would be pretty sure that it was waste rock. They would take from their little hidden sack some high grade cuttings and mix it with the cuttings from the waste rock.

Now, if you did this enough, instead of having just a narrow vein, maybe three or four feet wide and fifty or sixty feet long, here it was a nice high grade ore body as big as a house. They

could have easy mining, drill all these holes, soup up the samples. The samples would come back "high grade." Geologists would go down there and [direct them to] mine the whole thing. Now, it is waste rock, it is easy mining. The contracts get paid on tons mined. They didn't steal any gold but they were stealing.

Swent: Wouldn't this catch up with them in time, though?

Madsen: It would not necessarily because the mill had no way of taking samples of the ore coming into the mill. It is not a representative sample anyway. The size of the sample would have to be huge, maybe a hundred tons, probably more. Because of that, the method of determining how much gold was coming into the mill was determined by how much gold was recovered and how much gold was assayed in the tailings going out of the mill, of which they could get reasonable samples from. They would add those two together and they would say, "That is what is coming into the mill." Okay, so what is going out? What are the tails and the gold recovery, that is what is coming in. So, how do you really know what is coming in? You don't know what is coming in. It's a reverse sampling system. That has been true of Homestake ever since they have been mining.

Swent: But then if they had X number of tons coming in and a certain quantity coming out, that would indicate--

Madsen: Yes, but you are just talking about one contracting group underground. You have maybe thirty or forty contracting groups mining all at the same time and this ore gets all mixed up. Which came from where? Unless you sample the ore cars, you really don't have a representative sample. All you have is a very small amount and it is not a representative sample; if you take the sample out of the ore car--and you really can't do it because it is not crushed or--you would have to take the whole ore car.

They might have done it that way but--I doubt that contractors that might have done this were ever caught. Who knows--nobody has ever--at least contractors won't talk about it, not to me anyway. They might talk amongst themselves if they know each other. The only way they could get that high grade cutting material is to actually know where the high grade was and collect extra cuttings from that high grade zone. There are a lot of ways to skin a mule, I guess.

Swent: And you actually found out about this after you were no longer working there?

Madsen: I was told about it. I didn't find out about it. I was told about it.

Swent: You might not have been told about it if you were still working there.

Madsen: The geologists might have talked about it.

Swent: Tell about the other one. This also came out when you were--

Madsen: Now I am on this consulting job--

Swent: This was after you retired from Homestake, then you became a consultant for some other firms?

Madsen: No, this was actually before I went to Kilborn. From 1976 to 1985, I was project engineer for Homestake at various locations; after 1985 I was consulting engineer for other companies. I didn't go to Kilborn until I was all through with this McLaughlin thing.

The mill in Lead was in the process of changing the sluice boxes to a heavy-media separation system. The sluice boxes and heavy-media separation systems are used to collect the larger particles of free gold.

Swent: Classifiers?

Madsen: They were classifiers before, but the type of classifiers were changed. Since that project they have changed them again, but this is in between. I was asked to go up there because I knew where all the papers and drawings were and everything else. I was the go-between between the designer, which was an outfit in Denver, and the metallurgical department in Lead, and the other people that had to be contacted for many things and stayed on that job. After the contractor that was there--it was just one foreman and maybe five or six men from North Dakota--the foreman had been working at the Mclaughlin mine.

Swent: As a contractor foreman?

Madsen: Yes. I have my times all mixed up. Anyway, it turns out that the contractors were stealing constantly. This I hear afterwards. I didn't know a thing about it at the time. But apparently he said that he had taken a little handful home, of concentrate, put it on his--he was living in a trailer over by Spearfish someplace. Apparently he put that little bit of concentrate there, picked up a pair of tweezers and picked up a fleck of gold. This is easy. Apparently he got greedier, and greedier, and pretty soon he was taking home--like a carbide can, maybe twelve inches in diameter and two feet high or something like that--of concentrate.

Swent: Every day?

Madsen: I don't think every day, no. He was doing what it took to melt this stuff into little bars of gold.

Swent: You said he had a muffle furnace.

Madsen: Yes. A muffle furnace apparently is just a propane-fired box with a fire brick lining in it, the best I can describe it. He went on vacation--

Swent: He was making doré bars--

Madsen: Yes. He had sold the gold in California and then came back to Lead. While this was going on, I don't know where and when he was actually stealing gold. John Ransone called me and said, "You are going to have to be terminated now because Roy Cellan is finished with his work and we haven't any job for him and you are a consultant. You are excess baggage." That is me.

Okay, back to Grants I go. Then, I thought after a few weeks--I still had an office at the Grants mill--I decided to call up the assistant mill superintendent up in Lead and ask him how that gravity separation thing worked. I called and talked to him for just a few seconds.

He said, "Hey, did you hear about the big bust?"

"Oh, what bust?" Then he told me all about this fellow selling gold. He had sold the gold for cash, apparently. He went to Deadwood and he bought two brand new pickups and paid cash. This triggered the investigation. This fellow buys forty thousand dollars worth of cars--I don't know if it was that much--nevertheless, it was a big chunk of money.

Swent: In cash.

Madsen: Yes, cash, not a check. If it was a check it would have been different. Then he was found out and he wound up--I guess he wound up in jail for two or three years, or whatever it was. I am sure he is out now. Apparently he said that he just got the fever. He told them everything. He told the Homestake officials and court or whoever was involved. He got caught up in it and he just couldn't stop. It must have been like an alcoholic.

I remember later on--this was when all of the trials are done and everything else--I had to go to South Dakota for some other reason and I am going to San Francisco. No, I went back to Albuquerque, then I am going to San Francisco. In Albuquerque I

bumped into Dick Stoehr. We were on the same plane so we managed to sit together. Dick of course is a gold nut like I am, so I get to tell him all about this gold bust. I have always wondered if Dick was on there just to find out if I was involved in stealing the gold. We had a good visit, and that is that part.

Sherritt Gordon: Ignorant about Let-down Valves

Madsen: Now do you want me to say something else about the Sherritt Gordon business?

Swent: Yes, I think that is appropriate.

Madsen: Now we are way back in the early days of the McLaughlin project and my first two weeks out there. Sherritt Gordon had one or two guys down there. I met one of them.

Swent: We should identify Sherritt Gordon.

Madsen: Sherritt Gordon is a Canadian consulting and mining and milling outfit. It has a reputation up in Canada. Anyway, Sherritt Gordon people had been involved in trying to figure out what best way to do the autoclave. Sherritt Gordon has autoclaves up in Canada apparently.

Swent: But they were for nickel, weren't they?

Madsen: Yes. Their autoclaves were operated in a batch process. I got to know that. Because it was a batch process they didn't have this problem of let-down from a continuous flow. They could separate--they could shut it down for several days and let the steam off. They had one fellow there that was involved in trying to advise Homestake how to go about the autoclave business. Apparently the metallurgical part of it was all right, but when he came to the flow sheet part and how to operate the valves and whatnot and the things that I am familiar with, I told John Ransone that Sherritt Gordon doesn't know what they are doing.

Swent: Specifically you had said he had wanted to turn the valves off?

Madsen: The type of valve arrangement that we are talking about, what would work, I knew this from my own experience.

Then I can relate back to another trip that we had made. I am not too sure exactly when this happened. We had a trip with Jack Thompson, Joe Young, Bob Lear, and myself. We went up to a

plant in British Columbia that was a zinc plant. They had zinc sulfide--I am confused as to what the materials were now. Anyway, they had an autoclave there and a let-down system and this same tungsten carbide valve that I have talked about before. Once again I asked of this British Columbia group how long their valve lasted. It lasted two days in their place and they were happy with their system, even with the two days. You couldn't have lived with that with the McLaughlin project. All this relates to my saying, making all these noises about the let-down system and the advice that Homestake got from Vaal Reefs and were successful in what they did.

Swent: You told John Ransone that this valve that Sherritt Gordon recommended--

Madsen: The way they were going about it told me they didn't know what they were doing. From a metallurgical viewpoint and from a flowsheet and all these nice things, great, but that valve wouldn't have lasted at all.

Swent: I think you said they were going to turn one valve off and open another one?

Madsen: You have to be a little familiar with how an ordinary boiler works. In an ordinary boiler they have what they call a blow-down system to get rid of the sludge that forms in the drum and reduce the concentration of impurities that form scale. Depending on the water treatment and things like that, there is a periodic blow-down of the sewage that is in the boiler, the water, just plain water with perhaps some impurities in it. They have two valves associated with this blow-down system. One valve is what they might call the wear valve. The other valve is the tight shutoff valve to stop the leak. When you are blowing down a boiler you open the tight shutoff valve first, then the valve that is going to wear out that you can change you open and this very high velocity steam that changes velocity as it goes through the valve is opened and then closed. Then the tight valve is closed. This is this blow-down system. If there were lots of sand and sharp quartzite particles in the boiler, that one valve wouldn't last at all. In the autoclave that we are talking about for McLaughlin, you are not talking about just a little bit of particles, you are talking about a slurry that is 30 or 40 percent solids, someplace in that neighborhood, and sharp particles, and not fine. So that is more on this blow-down thing.

Swent: What is the difference between a blow-down and a let-down?

Madsen: Same thing. It is essentially the same thing except that when we are talking about the let-down with the autoclave system this is on a continuous basis. It is running all the time.

Swent: You can't be in there changing valves every few minutes.

Madsen: Oh, no. If you change valves you have to shut the whole thing down. It takes a day to shut it down and two days to get it started up again. The construction of that valve and the wear properties of it at that time were overwhelming, at least until Vaal Reefs pointed out some of these things to us.

Swent: You came up eventually with the tungsten carbide valve?

Madsen: No, it wasn't tungsten carbide; it was a material quite similar to what are used in grinding wheels, only more so. It was a molded silicon carbide, tungsten carbide--I don't really know what that material was to make the valves.

Swent: How long does it last?

Madsen: You know something, I don't know that. The people at Vaal Reefs, when I asked them how long the valve lasted they said, "I don't know. We haven't worn one out." So we felt--

Swent: So it has lasted?

Madsen: Yes, at least for them, and apparently did for us. I hadn't stayed at the Mclaughlin project very long after the place started running. I was involved in other things and everybody was--I wouldn't say that I wasn't welcomed but nobody was asking me any questions, so I thought, "I guess it is time to leave." They are happy with what they got.

Swent: But they would have to close the whole thing down if they changed the valve?

Madsen: Yes. If the valve only lasted a couple of hours you can't run. One way or another they solved that problem.

Swent: So, shortly after your recommendation was when Sherritt Gordon was phased out of the picture?

Madsen: Yes. Everybody else was kind of ticked off at them, too. I think John didn't like some of the things they were doing.

Swent: You also said their drawings looked pretty amateurish to you.

Madsen: One of them did. John showed that one drawing to me. It was a kindergarten sketch of some kind that cost a small fortune.

Swent: I think you said a hundred thousand dollars?

Madsen: Yes. That must have been for several people working up in Sherritt Gordon, and a whole bunch of other things. I am sure it wasn't just for that one drawing. Homestake was paying Sherritt Gordon pretty fat consulting fees.

Swent: Those things happen.

Madsen: That is it for now then.

Solving a Pumping Problem at Mercur for Kilborn

Swent: I guess so. Well, we hadn't mentioned--you might mention it now--when you retired from Homestake you did consult for other firms and their pumps and so on.

Madsen: Yes. From 1985 on, I was consulting engineer for several other companies. Shortly after I left Homestake and the Homestake consulting business I went on a consulting job with Kilborn engineering of Toronto. I was home and got a telephone call from one of the Kilborn metallurgists that I had met. He said he wanted me to come up to Mercur up near Salt Lake City the next day. They were in a hurry.

Mercur had put in an autoclave system and they were having hellacious trouble with it. It was for gold but not an acid process so they didn't have the same problems that Homestake had. I went up there and their problems at Mercur were not so much on the valve as they were on the pump characteristics and flow characteristics. They had a pumping system where they were pumping high temperature fluid from one place into another tank with an automatic control. The characteristics were such between the pump and the system characteristics that a very, very small pressure change would give it tremendous change in flow rates.

They were pumping cold fluid into a tank that had steam being added to it and the slurry was being heated up to a rather high temperature. Then, if the pump speed changed, this hot slurry would go back into the pump. The pump had a ceramic impeller on it which was very, very, sensitive to heat changes. The change in temperature was such that the ceramic impeller just

exploded because of the heat stress. That was one problem which I showed them what was happening.

Then there were some pipe sizes that were way too small and had hellacious velocities in some of the steam pipe lines. After that, my record with Kilborn went up a little bit so they kept me on for a couple of years. I enjoyed that challenge. It was fun. If someone is listening to all of this and is trying to figure out which happened when, tell them I don't know myself. I lose track of it.

Swent: Well, thank you, Roger.

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MERCHANT AND CRAFT INSTRUCTOR, LOWER LAKE

An Interview Conducted by
Eleanor Swent
in 1996

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Beverly Magoon, ca. 1982.

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INTERVIEW HISTORY--Beverly Magoon

Beverly Magoon, owner and operator of Magoon's General Store in Lower Lake from 1979, adds to the Knoxville District/McLaughlin Mine oral history a perceptive view of the community which has attracted retired people, artists, and families looking for a good place to rear children, in addition to mine workers. She has been president of the Civic Club, in charge of the annual Lower Lake Days parade; she often performed as the witch at the PTA Halloween party. As she says, "You always know everything in a general store....Everybody in town had a charge account with us."

The invitation to participate in the oral history project was sent to Beverly Magoon in October, 1995 and the interview was conducted on 31 May 1996 at the store late in the afternoon. The quilting class had left, and two dogs, daughter Pegeen, and Beverly were the only ones there, unwinding after a hard day and week. The shop was filled with bolts of fabric, sewing and craft supplies, and handicrafts for sale. On the walls were quilts and woven wall hangings; it was a cozy, comfortably cluttered place. Outside, Main Street looked more prosperous than at some times in the past, with the shop fronts refurbished and unified.

Beverly Magoon was born in 1934 in Weedpatch, California, a colony for migrant farm workers. Her father, a carpenter at the camp, was from "back East"; her mother was from Washington state. Beverly was three when her mother died and then the owners of the camp, whose three-year-old daughter had died earlier, adopted her, giving her, she says, "a neat upbringing." She went to Bakersfield schools and community college, and was married at sixteen to a young man of nineteen whom she met at church. They had four children; then they divorced and she married Gene Magoon, a chemist for Shell Development Company who had three children. His ex-wife later married Beverly's ex-husband, making a family of seven children. The move to Lower Lake came when they rejected a job transfer which would have separated the family. During the 1960s Beverly was a weaver, part owner of a craft shop near the University in Berkeley, and a friend of weavers and potters who have since become famous.

Beverly says in her interview:

> He always loved hardware stores....He was reading the paper one night, and he said, "Oh, here's an old-fashioned general store for sale in Lake County".... So we came up and looked it over, and we fell in love with the town....It was a funny, old-fashioned store, but kind of really the hub of the community....We had all kinds of feed. We had chicken

feed, pig food, horse, pigeon, wild birds, dogs, cats, just about anything that needed feed, we carried it. And we had a butcher shop for a while.

When the mine opened, she says,

> It was just a really busy time....They [the miners] bought some things from us, but I don't remember it really being a boom. I think it was more for the bar than it was for us. Some people had more money than they had before because they were working in construction there, but I wouldn't say that we had that much difference.
>
> Well, the mine put in a road. That made a lot of difference. But ...the road was torn up for a long time, so that wasn't very advantageous, so there's kind of that sort of positive and negative things.

The tapes of the interview were transcribed in the Regional Oral History Office and the lightly edited transcript was sent to Beverley Magoon for review in June 1997. She reviewed it thoroughly and returned it within two months, adding a recollection of her mother and changing the spelling of a name. The manuscript was corrected and indexed at our office. The tapes are deposited in The Bancroft Library and are available for study.

The Beverly Magoon interview is one of more than forty interviews which were conducted by the Regional Oral History Office from 1993-1998 in order to document the development of the McLaughlin gold mine in the Knoxville District of Lake, Napa, and Yolo Counties, California, from 1978-1996, as part of the ongoing oral history series devoted to Western Mining in the Twentieth Century. The Regional Oral History Office was established in 1954 to record the lives of persons who have contributed significantly to the history of California and the West. The office is a division of The Bancroft Library and is under the direction of Willa K. Baum.

Eleanor Swent
Project Director, Research Interviewer/Editor

Regional Oral History Office
The Bancroft Library
University of California, Berkeley
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Regional Oral History Office
Room 486 The Bancroft Library

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Berkeley, California 94720

BIOGRAPHICAL INFORMATION

(Please write clearly. Use black ink.)

Your full name Beverly Joan Magoon

Date of birth 11-3-34 Birthplace Bakersfield, Calif.

Father's full name _____

Occupation _____ Birthplace _____

Mother's full name _____

Occupation _____ Birthplace _____

Your spouse I lived

Occupation _____ Birthplace _____

Your children James Steve Gekas, Jr. Joanie Epidic, Pegeen Niaga Julie Jones

Where did you grow up? Bakersfield

Present community I still live in rural Yolo Co., Ca.

Education High School, some college

Occupation(s) ret. ret. insur., formerly general store owner, quilting and weaving teacher

Areas of expertise sales, quilting, weaving, sewing

Other interests or activities cooking, sewing, gardening

Organizations in which you are active none

INTERVIEW WITH BEVERLY MAGOON

MERCHANT AND CRAFTS TEACHER IN LOWER LAKE, 1971 TO 1996

[Interview 1: May 31, 1996] ##[1]

Orphaned and Adopted near Bakersfield

Swent: Here we are in Lower Lake, California, on May 31, 1996--in Magoon's Fabric Shop?

Magoon: General Store.

Swent: But mostly fabrics.

Magoon: Mostly fabric, yes.

We've got problems with the dog here. She's usually not on this chain, but a pit bull came in--a very friendly pit bull--but she decided to attack it. She should have known better, being a Pekinese. The lion dogs of China: they think they weigh six hundred pounds, like they did for thousands of years. [chuckling]

Swent: Let's begin by having you tell me where and when you were born.

Magoon: I was born November 3, 1934, and actually I was born in Kern General Hospital at Bakersfield, but my parents lived in Weedpatch, which is a little migrant camp about, I would say--let's see; I have to think about it. It must be about maybe ten miles out of Bakersfield. And my father was from back East, I think--Georgia to Missouri. And then he must have lived in Washington at some time or other. That's where my mother was from.

Swent: Washington State?

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[1]## This symbol indicates that a tape or tape segment has begun or ended. A guide to the tapes follows the transcript.

Magoon: Washington State, the town of Goldendale. She was from a very large family there. And they married and apparently moved down to California, and I was born in this migrant camp in Weedpatch.

Swent: They were working as farm workers, then.

Magoon: Yes. My father was a carpenter. My foster father, who eventually adopted me, had hired him at his place there to build cabins and to work around places, so I think he was doing that more than actually working in the crops by that time.

Swent: So that's where you get your crafts skills.

Magoon: I didn't think about that. I did have an older sister, and I don't remember her, but I did see her paintings; she did paint, so that's the only other artistic line that I know of in my family.

Oh, I forgot: I was told that my mother could look at the pictures in the Sears, Roebuck catalogue and sew an exact duplicate. No pattern! I can't do that, but maybe some of my sewing creativity came from that.

Swent: It's genetic, obviously. But you said your mother died when you were very little.

Magoon: Yes, I was three. She died of cancer. I have very few recollections. I have one of sitting in a high chair and her scolding me for eating the little macaronis out of the mortadella. I can remember that so clearly! I was scolded for doing that. I must have picked up a package off the table or something. That's about the only real memory I have of her.

Swent: And then you were adopted.

Magoon: And then I was adopted by the people who owned the migrant camp. They had had a little girl when they were quite young and she had died, and my father really couldn't take care of me very well, and my sisters and brothers were not really in a position to take another child--they had children of their own. And these people took me and adopted me.

Swent: How wonderful. They were good to you, obviously.

Magoon: Very good to me, yes. But they were my grandparents' ages, actually, so I have a lot of that kind of background and history. I know songs from the 1890s [chuckling] and old stories and things like that because they were older. It was a neat upbringing. I didn't think about it at the time because there were all these friends of mine with these beautiful mothers and my mother was

older, but now I really appreciate it a lot more. I think I got something I wouldn't have had otherwise.

Swent: Did you keep contact with your own siblings?

Magoon: Yes and no. I really lost track of them after I grew up. I just got back together again with a niece not very long ago. There's only two years difference in our ages and she's into quilting, and she likes herb gardening and gardening in general, and our lives have paralleled a lot, which I thought was very interesting. But all in all, I really don't have any contact with any of my former --my family.

Swent: They were a lot older.

Magoon: They were quite a bit older. And they've all passed away now, so it would be their children, the next generation.

Swent: So did you go to school in Bakersfield, then?

Magoon: Yes. I went to Williams Grammar School and Washington Junior High and East Bakersfield High School. And I took some college courses at Bakersfield College and over the years have taken a number of classes. Never graduated from a college, but I have enough credits for two years of college now.

Swent: And then where did you meet your husband?

Magoon: My first husband and I went to church together. That was where we met. He's the father of my children. I have a boy and three girls. And then we divorced thirteen, fourteen years later, realizing that we'd grown up different people; I was sixteen when I married, and he was nineteen; we were very young. And then I met another gentlemen. That was Gene Magoon. And he had three children. I was expecting my fourth at that time--this all sounds so crazy now.

Swent: No.

Magoon: And I had four children, so we actually had kind of a group of seven children for quite a while. And we were married for twenty-one years.

Swent: Where were you living then?

Magoon: We used to live in Berkeley, and we lived in Walnut Creek, and then we moved up here. That would have been 1971.

Swent: Did you still have children at home when you moved up here?

Magoon: Yes. Well, by this time, the children kind of migrated back and forth between--his wife remarried. In fact, this is really nuts, but his wife married my ex-husband, so we kept the whole family together! None of this was planned. We didn't just exchange mates. None of this was planned. But anyway, it has worked out over the years.

Swent: This is a wonderful story about contemporary family life!

Magoon: We've stayed together. I mean, everybody's been a lot closer, I think, because of that. Pegeen being the kind of the tail end of the thing has always kind of been--

Swent: Pegeen is your youngest daughter.

Magoon: She's the youngest one, yes.

Swent: Irish name.

Magoon: I was reading Auntie Mame the night before she was born, and there's a Pegeen, who falls off the ladder in the movie Auntie Mame.

Swent: I've never seen it!

Magoon: Oh, okay. And she marries the nephew that Auntie Mame is being mothered by. Anyway, I was reading the play then. I thought, "Pegeen. That goes with Magoon. That'll be perfect." So she was adopted by my second husband, and so she's Pegeen Magoon.

Swent: Oh, that's a great name. Irish front and back.

Magoon: Yes, it is. She always said, "Well, boys just don't remember my name."

And I said, "Well, if they really like you, they'll remember your name."

Swent: So you were living in Walnut Creek, you said.

Magoon: Yes, and my husband was working for Shell Development Company and he was told that they were going to move the company to Texas. And he didn't want to be away from the children if they were going to stay with their mother, and I didn't want to be away from my children, if they were going to stay with their father, so this part-time thing wasn't going to work out that way.

And he happened to be reading the paper one night--and he always loved hardware stores. He just loved to go in a hardware

store and look at things. And he was reading the paper one night, and he said, "Oh, here's an old-fashioned general store for sale in Lake County. Shall we go and look at it?"

And I said, "Yes; where's Lake County?"

And he says, "Oh, I don't know. It's north of here someplace." So we came up and looked it over, and we fell in love with the town.

First we went to Clearlake. I said, "Oh, I don't like it over here." You know, it was kind of touristy and real busy, and that's what we had come from. Because we'd kind of been looking, after we'd heard this news about the move, kind of looking at places in Walnut Creek and Concord and around there, and either we couldn't afford it or it looked like it would be too big a hassle for us to really change careers like he would be doing.

And so when we came up here and we drove into town, I said, "Ah, I like this. I like this town." We parked under some trees across the street from the old store, and I said, "I think we're home. This is the place." That's how we started up here.

And our kids--we had at that time three boys. The three boys were living with us, and Pegeen, and the three girls were living at the other parents. And it seemed like I was spending half my time in the principal's office and the other half the time at either the emergency or the sheriff's substation, with three teenage boys. So I said, "This will be great. We can get them away from the city." So that was what kind of motivated us coming up here.

Swent: Had you worked outside your home? Obviously, with all these children, you were working.

Magoon: Not really.

Weavers and Potters in Berkeley in the 1960s

Swent: You had no background in business?

Magoon: No, I had had a little store with some other ladies in Berkeley for a while, but it was just a part-time thing. I knew quite a few of the--well, they are now famous--but Peter Voulkos and, I'm trying to think, James Melchert. I have a piece of his pottery, which I traded for some yardage, I think, for his wife. Well, we

had a little weaving shop. I don't know where he teaches, but I think he still teaches. Anyway, these people had things in our shop and would come in every once in a while.

Swent: And you were doing craft work, yourself?

Magoon: I was weaving. Yes, I was not doing anything in the clothing line except just at home, but I had fallen in love with weaving. I was taught by one of the other shopkeepers there.

Swent: Let's get some names.

Magoon: Okay. Well, Janice Bornt. Langdon is her name now. And, oh, goodness, Chrisman. I can't remember her partner's name. Chrisman was her second name.

Swent: And you were part owner of this shop?

Magoon: Yes. We had a little shop called "The Weavers." It was on the corner of Berkeley Way and Shattuck.

Swent: And this would have been in the sixties?

Magoon: This would have been in the sixties, yes, about '62, '63, '64.

Swent: Berkeley was an exciting place in those days.

Magoon: It was! In fact, I was on campus talking to a friend when this young man ran into me, said, "Comes the revolution!" [chuckling] My friend was in the art department and he was going to do a statue, you know, where they make a mold of you. And we were talking about how you put this stuff on so that you could get the mold back off again and everything, and I went, "Oh, my gosh, I've got my car parked out by Sather Gate, up the street." [laughing] So I got out there, got in it, and got out of there before--

Swent: Before the revolution.

Magoon: Really! Riots started that day. But I was right there then, and our shop was just down a few blocks from there.

Swent: Pretty exciting.

Magoon: It was pretty exciting.

Swent: Lots of art ferment.

Magoon: Yes, there was.

Swent: Were you taking classes?

Magoon: The only class that I took at the university was a class in creative writing, and I loved the class. And I thought I could write, but no, I've never really done much with it, but I really enjoyed the class.

Swent: But you weren't studying art?

Magoon: No, not really. I was actually doing the weaving and working in the craft at that time. I knew Lillian Elliot. She was quite well-known as a weaver. She's passed away now.

Swent: Your husband Gene was artistic, also.

Magoon: Well, he's a jeweler now. But, yes, he did some painting. He was not trained to draw as much as he did enjoy--

Swent: Was he doing the jewelry work at that time?

Magoon: No, no. This was completely--he was a chemist at Shell Development. That's a creative field, too. I cannot comprehend that far-out stuff. But that was what he was doing.

Buying the General Store in Lower Lake, 1971

Swent: But when you moved up here, it was to buy this general store that already existed.

Magoon: Yes.

Swent: What was it called?

Magoon: It was called Lawson's. It was Kramer's before it was Lawson's. They had been trying to sell it for several years. They didn't sell it, and they were quite an elderly couple.

Swent: It was here on Main Street.

Magoon: Yes. It was down another block or so. And they had a going business at that time. It was kind of a holdover--well, the buildings had actually been there a hundred years. And so we had credit accounts. You know, we were a "jot 'em down" store, as the old Lum and Abner program used to say. And we also delivered groceries. I delivered groceries to Mr. Bayliss, who was the son of a pioneer family here, out at Point Lakeview, and several other

people that lived out there. He'd always call up on Friday afternoons and place his order, and I'd write it down. It was almost always the same thing. And then I'd drive out there, because he only drove a tractor, he didn't drive a car. [chuckle]

And we had feed in the back. We had a big feed room and a big loading dock. Believe it or not, at my hundred and twenty pounds, I could lift a hundred-and-twenty-five-pound bale of hay, which is not too hard. If you use your leverage and the hay hooks right, you can do that. And, of course, I had a loading dock. We had feed, and we had groceries, and we had hardware. We had horseshoes, and we had--

Swent: Fabric?

Magoon: Yes, we just had a little fabric. We didn't have a lot of fabric. We had Aladdin lamps. And I remember the first Aladdin lamp I sold, and I thought it was so expensive, was like $16.95. They're now, well, I have one up there that is $249, so you can see how that has changed in twenty-five years.

It was a good store. It was a funny, old-fashioned store. Really, at that time, kind of the hub of the community because there were no other feed stores between here and Kelseyville. Kelseyville, I think, was the next feed store at that time, so we had a lot of feed store business. And we had a butcher shop for a while, and I even ran that for a while. [chuckling] I cut meat.

Swent: That's a real specialty.

Magoon: We had a deli.

Swent: Now, what kind of feed? Is this hay for horses?

Magoon: Hay for horses. Well, we had all kinds of feed. We had chicken feed, pig food, horse, pigeon, wild birds, dogs, cats, just about anything that needed feed, we carried it.

Swent: You just learned as you went along, I guess.

Magoon: Pretty much. We had to mend a lot of fences because old Mr. Lawson was kind of an irascible old gentleman and he had alienated a lot of people, so we kind of went out of our way to be friendly. And eventually we would have parties once a year in the back of the old store. We'd get a band and we'd have kind of a hoe-down. Everybody sat on hay bales and brought pot luck. Pot luck would consist of something like a whole turkey. People brought things like that. [chuckling]

Swent: [chuckling] How many people would come?

Magoon: Oh, we'd have fifty, a hundred people, which was quite a few people back then.

Swent: How much did you pay for it? Or how did you pay for it? Did you just buy it outright?

Magoon: Let's see, we'd usually pay in advance or something.

Swent: I was thinking of the store.

Magoon: Oh, the store. You mean how we bought it?

Swent: Right.

Magoon: My husband had severance pay from Shell, and I think we borrowed some money from his mom and dad at that time. And then we had a balloon payment we had to pay off after--twenty years? that would have been, maybe. And we paid that off and got through it.

Swent: It was quite a commitment, though.

Magoon: It was. Yes, it was a fair to middlin'.

Swent: Did the children work in the store?

Magoon: Oh, yes, the children loved working in the store--well, as long as it was fun. But after a while it wasn't always fun because they had to be down there all the time. But every one of them at some time or another worked in the store. And they have said now, when they're older, that they did enjoy it a lot. I know when we would have inventory on New Year's Day, Pegeen, of course, as the youngest, was to count the penny candy, which was behind the counter. That was her special job. She still remembers that. [chuckling]

Swent: So all the children worked at some time or another in the store.

Magoon: In summers or something like that, when they were in college or whatever they were doing.

Swent: Where did you live?

Magoon: We had a mobile home out on Bonham Road, which is about a mile, exactly a mile, from the store.

Swent: You didn't live right by the store.

Magoon: No, not exactly.

Swent: What sort of hours did you keep?

Magoon: We were open nine to six-thirty every day but Sunday. Long hours.

Swent: And then you went home to cook for four or five, six, seven people?

Magoon: Nine people, including myself. And we had to take care of the animals because by this time we had a couple of horses and assorted chickens and, gosh, what did we have? Rabbits, ducks, just whatever--

Swent: I don't need to ask what you did with your spare time. And the children were in school? Did they go to school?

Magoon: Yes. By this time, some of them were older, but the kids went down to Santa Rosa Junior College. My one daughter went on to Fresno State from there, and one son graduated from high school here; the others had already graduated from high school. And, of course, Pegeen went all through school here. The oldest son works now for PG&E here. And my oldest daughter has Epidendio Construction, which is the largest local construction--

Swent: That's her company?

Magoon: That's her's and her husband's. And that's Joanie and Mike.

Swent: So they have stayed here.

Magoon: They have stayed here and my son, Jamie, stayed here. He's married; has two daughters. One of them is graduating this next week from high school, and she's going on to College of the Redwoods. That has a good horse program.

Swent: Lower Lake has its own high school, doesn't it?

Magoon: Yes. And, of course, Pegeen is here.

Swent: Is she in school?

Magoon: No, she works full time for me here. She has a son; he's eleven. She's thirty-one. [chuckling] She won't mind me saying her age. She's my helper, my partner. Then my other daughter is a physical therapist and she works out of Madera Community Hospital, I think it is, in Madera.

Swent: So the store, then. You said you came in '71.

Magoon: July of '71.

Swent: And Lower Lake at that time was a community of how many people?

Magoon: I think it was about 1000. It was pretty close to it. It has grown on the outskirts. It hasn't grown that much downtown, however, I think. But there's a lot more traffic, because it used to be that two cars could pull up alongside of each other, out in front of our store or anyplace else, and the two people could visit, you know, in their pickup trucks, and other people would stop right behind them and just enjoy things. Or you'd drive on outside and around them. It was, like, "Hi, Bob." And nobody was rushing through town.

In fact, I had an altercation one night with a gentleman who had spent too much time down here at Lucy's Big Oak, which was the name of the bar then. And he was on his horse, and he dropped his hat out in front of the store, and he was a kind of heavyset man anyway, and the poor horse was trying to stay on its feet on the pavement as he would reach down as he went by and tried to grab that hat. I came out, because he was yelling by this time. I came out of the front door of the store, and I said, "Don't do that to your horse! You're gonna knock him over, and he's gonna break his leg." He called me a few names, and I said, "And don't talk like that to me." Well, by this time there were cars backed up this way and cars backed up this way, and I went out and I said, "Just stay on your horse and go home!" And I reached down, and I picked up his hat, and I handed it to him, and I just crossed my arms and walked off back out of the middle of the street.

And--he wasn't my son-in-law at that time, but my son-in-law to be--Mike Epidendio was sitting, I think, in the first pickup truck there, waiting for this to clear, and he said, "You wouldn't believe it, Mom, but he rode that horse, trying to ride over you, and the horse wouldn't do it. He rode right up against you." And I said, "Well, I knew something was going on, but I wasn't going to look back because I was mad at him." [laughter] He could kill the horse by breaking its leg or--it didn't make any difference to him. He could have fallen off the horse; it wouldn't have hurt him! So, yes, we had a lot of adventures.

President of the Civic Club and a Good Halloween Witch

Swent: This may be ridiculous to ask because obviously you were working so hard, but were there any other community things that you could get into at all?

Magoon: Oh, yes. At one time I was president of the Civic Club here, which is the group that puts on our local Lower Lake Days parade. We have this one really neat lady named Pauline Willis, and she's president again now.

Swent: And when is your parade?

Magoon: It's always been Memorial Day weekend. It's on Sunday. I changed it from Saturday to Sunday when I was president because Lakeport had theirs on Saturday, and so I said, "Well, we'll do it on Sunday." And, gosh, I got a lot of flack from the local church here, but we managed and worked around their hours, so it worked out all right.

Swent: You got more attendance that way?

Magoon: Oh, yes, a lot more. My husband was on the school board for quite a few years. I never really did get into politics or anything like that, but he belonged to the Rotary Club, and I belonged to the Soroptimists, and we joined in a lot of the community activities and things that were going on around.

Swent: School things, perhaps?

Magoon: Yes, some. I never could get out because my hours were so bad. It was hard to get out. For a number of years I was always the witch at the PTA, when the PTA had a Halloween party. That was one of my specialties. I was a pretty good witch, too, wasn't I, Pegeen? I had a black lipstick and green makeup and then a wig. I was scary!

Swent: Oh, those things are fun to remember, aren't they?

There was a fire. When was that?

Magoon: I think the fire was about the early eighties. Was that '82, '83?

Swent: That was after the mine, then.

Magoon: Yes.

One Shot Mining Company: A Chance to Invest in a Gold Mine

Swent: Do you have any recollections? You said you talked to Bill Wilder. Homestake came in in '78.

Magoon: Yes, Homestake came in. The Wilders--

Swent: Were you aware that they had come in at all?

Magoon: Oh, yes. No, we were aware of it a long time before it happened. You always know everything in a general store, although you didn't always talk about things. But Bill and his wife, Kay--his business had come in because everybody in town had a charge account with us, and he bought things for the mine, too. Then they had us out to dinner a few times and things like that, and then when he said--because the bottom fell out of the mercury market not very long after they--I guess it was from Argentina or Chile, someplace in South America--and they were really struggling to keep it going.

Then he said something about this mining company was coming in and they had found gold and that they were going to take over. And he asked my husband if he wanted to join him, to buy into his company, which was One Shot Mining company. And my husband declined, saying he thought it was trading on friendship to [chuckling]--at least that's what he told me. I think that's what it was. I thought, well, I thought it was kind of a good idea. I'd like to own part of a gold mine. But anyway, we didn't do anything about it. But we did know about it a long time before, quite a few months or so before it came in.

Then it came in--I guess you say '78. I don't really know. But there was a great flurry of activity.

A Busy Time During Construction of the McLaughlin Mine

Swent: Well, that's when the first geologists came; I think it was '78.

Magoon: When they started doing construction, we had a little boom again here, because this was, years ago, a boom town of mercury. But anyway, it was so busy here. It was just a really busy time. Some wag drew lines from the post office, lines across the street, like crosswalk lines. And he drew lines from the post office across the street to the first bar, back to the Bank of America, and back across the street to the second bar! I guess he just

took like a roller with white paint. And, of course, the county came out and crossed that out. But we were pretty busy there for a while. [chuckling] That was when all the buses were going back and forth, so it was pretty busy for quite a while there. It employed a lot of local people.

Swent: Did your business improve?

Magoon: I don't think really that much. It had stayed about the same up to that time.

Swent: They weren't buying the kinds of things you sold?

Magoon: They bought some things from us, but I don't remember it really being a boom. I think it was more for the bar [chuckling] than it was for us!

Swent: I was wondering if the construction workers were--

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Swent: People came here for the walnut crops, you say.

Magoon: Yes.

Swent: Harvesters?

Magoon: Oh, yes, because this is a great area for walnuts. We sold things like kneepads and gloves and just groceries and things like that. We did have quite a few people from the mine that bought from us, but there were so many out-of-town people, it wasn't really that much of a local thing, I don't think. Some people had more money than they had before because they were working in construction there, but I wouldn't say that we had that much difference.

Swent: It wasn't a big boom for you.

Magoon: No, not really. You know, it was good, but it didn't make that much difference, I don't think, to us. But the general feeling of the town, I think, was really good then. I think a lot of people thought, "Oh, boy, something is going to happen." Well, the mine put in a road. That made a lot of difference. But them putting in a road--the road was torn up for a long time, so that wasn't very advantageous, [chuckling] so there's kind of that sort of positive and negative things at that time.

Swent: Did the population of the town grow?

Magoon: I don't really think so. I don't think so.

Swent: A lot of them lived in Kelseyville, I guess.

Magoon: Yes. I do know a number of people who work at the mine now, but I didn't know they worked at the mine. They were just local people. So I wouldn't say that I noticed that much difference in a change in the population. We have had people come and go that weren't here before, were here more during the construction of the mine, and then left again, so it was probably six to eight months. I don't know how long the construction lasted--a year at the most, wasn't it?

Swent: At least that, I think.

Magoon: Yes, I would say something like that.

The Devastating Closing of the Bank

Swent: The construction ended, I think, in '85. It probably began in '83.

Magoon: And the bank did a big business with them. And, see, by that time I was in this store. We'd already had our fire, and I was in this store. When the bank closed, I think that was really devastating to everyone around here, and it was kind of after all the people cashing their checks and all that kind of activity, so that was directly influenced, I think, by when the bank closed.

Swent: Was the bank new? Or was that already here?

Magoon: No, the bank had been here since 1946, but that was about the time that Bank of America was having all those problems, too, and so when the construction dropped off and their banking activity dropped off, they just figured it was a good time to close that bank, I guess.

The Hardware Store Burns in a Fire, 1982 [?]

Swent: So let's mention the fire. That was what? About '82, '83, something like that?

Magoon: Yes, something like that. This boy had got mad at my daughter because she had offered to go with her girlfriend to the police because this boy had threatened her girlfriend. Actually, it

didn't make any difference. The police said they couldn't be doing anything anyway. But anyway, he had heard that Pegeen was involved in--that they were going to go to the police, and he said, "I'll get even with you." And that same night the store burned down. And he was kind of crazy because afterwards he told people that it wasn't him; it was that "other Charlie" inside of him that--

Swent: Oh, dear.

Magoon: --had caused the fire. I had no insurance on the store, and this was about the time that insurance really doubled and tripled and stuff like that, and the store wasn't doing that great that I felt like I could afford a lot more insurance.

Swent: Were you still married at that time?

Magoon: We were still married. We were not doing that well, but we were still married. Then after the fire--

Swent: Did it destroy everything?

Magoon: No. Actually, it only burned the back of the store. There's a funny story I can tell you about that, too.

It got up into the roof, into the front through that way, so there was a little smoke damage. But the firemen were really great. There was a three-brick-thick wall between the back of the store and the front of the store, so that really saved the store. Then the firemen were there right away. But they had some kind of a thing that if the fire chief decided that the building looked like it was destroyed to the point where it would be difficult to fix it, well, you could just declare it unsalvageable, so that was what he did, which was a shame.

But anyway, about that time my husband and I split up, and he just kind of washed his hands of the whole thing, so I had this burned-out building and had to find someplace else. And this was available, so that was when I came down here.

I was going to tell you this really funny story. Across the street from us at that time was the Odd Fellows [International Order of Odd Fellows] Hall. And upstairs at the Odd Fellows Hall they had a skeleton in a casket. And when they had their initiations they would have them look into this casket or something. I don't know exactly why they had this casket up there, but it had a <u>real</u> human skeleton in this casket. And this Odd Fellows Hall is still there, but if you look at it, it kind of leans like this [demonstrating]. It's kind of like this. And on

the outside was a fire escape. That building is a hundred years old, too. And on the outside was this fire escape, and you'd see kids running up and down that when the Odd Fellows weren't there. They had closed the building, but you'd see kids running up and down there all the time. And I finally said, "What in the world are those kids doing over there?" So we found out that the boys were taking the girls up there, scaring them by showing them this skeleton. They could force the door open.

And so we were worried that the kids were either going to fall off the fire escape or they were going to do something to the building. So I said, "We're going to go get that coffin with that skeleton in it!" So we--Marty Kurtz (Cactus Jack) and I--went across the street one night and up the stairs--in the evening, not night; it was still daylight--and carried that coffin across the street. It was shaped like, you know, the old-fashioned coffins, with room for the shoulders instead of a rectangular box. And we carried that across the street, and I said, "Now, what are we going to do with it?" So we stuck it up in the rafters at the back of the old store.

Well, we kind of forgot about it. At least now no longer were the kids running up and down the stairs and finally the Odd Fellows got it closed up and all this. And I called them. I said, "I have your skeleton. It's in my store."

"We don't care. We don't want it anyway."

So anyway, I had the skeleton. During this fire, one of the firemen was up in the rafters with a flashlight, trying to see if there was any fire. And they said he let out the most ungodly scream when he came across this box [laughing] with a skeleton in it! So when you talk about your skeleton in your closet, we had one in our attic! And I had forgotten completely about it. Well, probably from that, when we went to get it months later--we thought it would be fun to have it at a Halloween party--it was gone. So somebody got the skeleton. But I'm glad, because, you know, it may have a curse on it. That may have been why our building burned down! [chuckling]

Swent: Quite a responsibility to have!

Magoon: You think about it. You know, you don't think really that much, but that really was a human being at some time, so we had our own skeleton. [laughter] I probably wasted your time.

Swent: No, you're not. No, that's wonderful.

So you didn't rebuild that building at all.

Magoon: No, I couldn't afford to. In fact, I couldn't even afford to have it demolished, and my son-in-law, Mike Epidendio, took it down for the salvage. And I wish he could have salvaged some of the things because they were--like these six or eight--maybe they were twelve-inch--they were huge pillars that held up the store, down the center of it. And they just had to knock those down. He couldn't really afford to salvage them. He did salvage a lot of the brick, and there are quite a few places around here now. You could no longer build with them, but they're very decorative, these used bricks. And there are a lot of them around, and I see them every once in a while. And I know a couple of places where--P&L Bodyworks out here, at the La Rosa Center, off of [Oglin] Canyon Road, they have little pillars made out of those bricks. And my son-in-law has a fireplace at his house made out of those bricks, so there were some uses for those bricks.

And in there we found one brick--I thought I used to have it here. But anyway, it says--what was his name? "John Ely," and it says, "1893." It's not carved, but probably when the brick was still wet, before it was poured, it was cut into that. And my son-in-law found that just in this rubble, you know, after they pulled it down, and he brought it and gave it to me. I have that old brick.

Swent: So then you moved here, did you?

Magoon: And then we moved here. That was quite hard to consolidate this big building, which was four times this big, into this. This shop here was all hardware and plumbing supplies. We did a lot with plumbing supplies, and nuts and bolts. And then maybe, oh, five years after that, my hardware company, the old Thompson-Diggs Company out of Sacramento, went out of business. They just couldn't compete with all these Wal-Marts and K-Marts and so forth. And they had such neat stuff. Because we had things like cast iron pots and tinware, which you don't find anymore. And things made out of wood. And old ice cream freezers and, you know, just all this--pear corers and peach pitters and horseshoes and all the wonderful things that we had had. They went out of business.

And so I just really at that time--my husband bought a hardware store; I was running a hardware store. By this time he was running a jewelry store. I said, "This is the time to stop," so then I got into this sort of thing. But at one time we did sell a lot of things to the mine, back when we were at the other store, to both One Shot and to the first people that went in with the construction. We sold quite a few things to them. I had forgotten about that. Yes, we did do that.

Teaching Quilting: Recent Changes in Tools and Techniques

Swent: But now it's just fabrics and--

Magoon: Yes. I've specialized here in the fabrics and yarns and embroidery floss. Behind you there's a thousand dollars' worth of embroidery floss, wholesale, sitting in that little case. And, of course, the quilts. The quilts--

Swent: And your weaving.

Magoon: I had my looms at the old store, too, because that was what I did originally, but I found that I could make more money doing the quilts, because you have to have a loom and all this stuff, and most people do have sewing machines but not looms. So anyway, I thought it was better with the quilting. I taught quilting through the college for a while, the junior college here. And that was fun. I enjoyed that. But we'd have thirty people in a class; well, now my classes consist of maybe up to five people, so you get a lot more one-on-one kind of thing. I really enjoy doing that.

Swent: There were as many as thirty in a class?

Magoon: At the college, yes, there were. And we had the classes back here for a while, too, besides being at the college, and those were kind of neat.

Swent: Are they still offering quilting at the college?

Magoon: No, they don't offer any of what they deemed "frill" classes anymore and because of my not having a teaching degree, it couldn't be an accredited class. But I sure had a lot of people enjoy those classes. And still have them come in and talk about--

Swent: There's a lot of arts and craft work around here, isn't there?

Magoon: Yes, there is. A lot of people really have time for it.

Swent: Is that it?

Magoon: I don't know. I think so. A lot of people who retired up here wanted something to do that would be creative, and they've taken to, I think, the arts and crafts a lot more because of that. And a lot of young people with not much money still want to make something, and instead of buying ready-made things they're interested in making quilts for their families and things like that.

Swent: Is this a big retirement area?

Magoon: Yes. Quite a large retirement area. I would say more than anything else. I don't know the average age, but I would say it was an older population than a lot of counties. Even in the old store, you didn't have that much baby stuff, for babies and young people. There just wasn't that much of a market for that. I thought that was always an interesting demographic fact. But it's very true.

Swent: So now you're making Amish quilts.

Magoon: Well, I've done a lot of them before. I just didn't happen to have any in the store right now, and I do love them, so--in fact, I'm teaching a little weekend seminar on Cobb Mountain, not this weekend but next weekend, and we're going to be doing a particular quilt that's up there called "Around the Twist," and one lady is working the Amish colors. I just thought, "Oh, that will be fun. I'll do something to share with them." Anyway, the Amish colors are so dramatic. I really enjoy them.

Swent: Have there been any new developments in quilting? Some of these new materials have made it different.

Magoon: No, I would say not so much new materials; almost everyone who really is into quilting uses 100 percent cotton, but I would say the tools to work with the quilts and the techniques have evolved, I would say, in the last, oh, ten years or so, dramatically. Things like the rotary cutter and the Teflon cutting board, and some of those have sparked the strip quilting, where you sew pieces together and then cut them the other way, and then sew those together and then cut them the other way. So it has gone a long ways from the template out of cardboard that you traced around and then sewed together by hand. There are a lot of programs on TV that emphasize the quilting or crafting, and I think this has got a lot of people into doing things that they--

Swent: The fillers.

Magoon: Yes. Like, you're sitting right next to this cotton batting, which is a very revolutionary cotton batting because it's done on a scrim so that it is 100-percent-cotton batting--it does have a scrim, which I don't know what that's made of. It's very fine, a very fine netting inside of there. But you can quilt up to ten inches apart on that, where the old-fashioned cotton batting which our ancestors used, three-quarters of an inch was the farthest away you could quilt before it would start to lump when it was washed, so this stuff is just great.

Swent: It doesn't lump at all.

Magoon: It doesn't lump at all.

Swent: It's almost like a felt.

Magoon: Yes, and it has to be washed before you put it in a quilt, but other than that, it's great. And once it's in a quilt, it's--

Swent: It's better than this fluffy stuff?

Magoon: Well, the trouble with the poly[ester] fibers is that they're done in a long--it's all one fiber, and they have, even with the bonding, to keep it compressed inside the quilt, sometimes, especially on a very dark quilt, it will have a phenomenon called "bearding."

Swent: Bearding?

Magoon: Bearding. And those little fibers will come through the quilt, and you've worked all these hours and hours putting the quilt together, and then you have these little beards, these little fibers of polyester that come out through the quilt, and they won't stop. They just keep coming out. The more you wash it, the more they come out. So this is why a lot of people have turned more toward the traditional cotton batting because they don't want that happening. But polyesters on a light quilt will last for a long time, even with washing. But the cotton batting, I think, is a really nice innovation.

Swent: Well, it isn't like great-grandmother's quilt, exactly.

Magoon: Not exactly. There are a lot of people who try to emulate great-grandmother's quilt, and they'll purposely tea-dye with spots to make it look old-fashioned, and leave the backside of the fabric, or leave it out in the sun to bleach it, or something like that. But then there are also some wonderful art quilts being done that are just art. They're just wonderful pictures, and you see all these wonderful things happening in them. A lot of fiber artists are first of all artists. They have taken degrees in art, and then they turn to fiber. And some of them are just magnificent, magnificent quilts. And a lot of machine quilting. A lot of machine quilting being done now. The hand-quilting is wonderful, but it's so slow. It takes so long. I'm working on one now that will probably take me another month to finish, just the quilting on it, for someone else. It's not mine.

Swent: You're talking about the quilting after you do the patchwork.

Magoon: After you do the patchwork, there's still the quilting. It's not a quilt unless it's quilted!

Swent: No, that's right. How do you feel about patchwork versus appliqué?

Magoon: I love both of them. I love to appliqué. Patchwork is usually a little faster, but you can do such intricate patchwork that it becomes as slow as appliqué. There are some nice innovations in appliqué, such as the bonding. It's a paper that has a bonding that you iron on. I usually sell Wonder-Under or Heat-and-Bond, and you can actually adhere your material to your fabric and then quilt around it. The purists you know want you to take your fabric and turn under the edges, but there are even some neat ways of doing that, too, that people come up with.

It's a very innovative field. I mean, there are books constantly coming out about new ways to do things. And I would really like to write one of those books, because I'm always coming up with something, and when I see it someplace else later, and I've already figured it out myself, or I come up with these things every once in a while and say, "I can write a book."

Swent: I'm sure you could.

Magoon: Because of what I've been doing for years. But it will be a funny book if I ever get it.

Swent: Well, it will be a good one, because you know what you're talking about. Somebody told me that the grape quilts are traditional for Napa Valley? Is that true?

Magoon: Well, I would say Napa Valley would be a place that they've been very interested in grapes, so I would imagine--I think that lady that did the one that you liked so much? I think she was living in Napa Valley--

Swent: Yes, she was.

Magoon: --when she did that one. But the grape theme, of course, goes way back. It's even a Biblical theme, and years ago a woman's education was very much along Biblical lines, and the grape was a symbol.

Swent: A natural theme, too.

Magoon: A very religious theme to a lot of people, and stuffing each one of those little grapes was very special, I think. Those are hard to do, too!

Swent: I can imagine. Have you ever made one?

Magoon: No, I've never made a whole appliqué quilt. I've made a number of quilts that employed appliqué, but not to the point where that lady took it. That was a wonderful quilt.

Swent: It really was a beauty.

Magoon: It was unbelievable. But I love appliqué. I love to sit and work just with my hands.

Swent: Have you done any reverse appliqué?

Magoon: Like the *molàs*?

Swent: Yes.

Magoon: A little bit. Just enough to know how to do it so that I could teach it. I haven't really--

Swent: People here don't seem to do that as much. The Southeast Asians do it and the San Blas Indians do it.

Magoon: I was reading an article about how the Peace Corps people kind of encouraged them to make the small things for export, and a lot of the people who are purists in that said, "Oh, that's ruined the whole thing." And I thought well, it gave those people--

Swent: It gave them bread.

Magoon: Yes, bread. That was good, and it does spread the knowledge of that beautiful work.

Swent: So your students here are retired people and young people both?

Magoon: Yes, both. I have both. In fact, I'm very thrilled that a young lady who asked me to be her mentor for her senior project did her quilt, and we got it done in the time allotted, and she gave her talk, and she got an A on it.

Swent: And she would be what? Seventeen?

Magoon: Yes, sixteen or seventeen. A very good student. I mean, a very good student for me. She's very bright, a very bright girl. Interacted really well with the other, older students that were in the class, too. But she followed directions, and she paid attention, and she said, "You've given me more attention than I usually get in the big class in school in home economics." She came in the other day with her mother, and said, "I want to make

another quilt." She's finished with it now, and she's going to graduate in another week or so, but she wanted to make another quilt, so she bought the material, and she's ready to make another quilt. So she'll be here probably tomorrow to start on her next quilt. It's going to be a full-size one, rather than just an art project. I was really thrilled about that.

And I have older people who always wanted to quilt but were too busy raising families, having a job, and so forth; never got around to it before. I have one lady--in fact, she was here a little while ago--she's eighty years old, she's had cataract surgery, she's been through a lot of things, and in the last two years she's made twenty-five quilts. She has them machine-quilted. She says, "I don't have enough time left to do all this by hand." And she sends them off. She says, "It's not always perfect, but I love it and I enjoy it."

So I have both extremes. And all the people in between. They work along, and then they do something else, and they come back.

Swent: Have any men shown interest?

Magoon: I have had several men over the years. I have tried to encourage them when they show any interest at all when they come in. This gentleman right now--he finished his first quilt and did a great job, and he's done several wall hangings since then. And he said he wanted to learn to sew garments, so I've been helping him make a shirt. We've done flat-felled seams, and he's coming back to do button holes. Hopefully, he'll be able to wear it tomorrow for a wedding that he's going to. Tomorrow or Sunday.

Swent: How nice! How old is he?

Magoon: I would say he's in his late sixties. A retired engineer. And he bought a new Bernina so that he could have a good sewing machine, and he's doing a great job. He really enjoys it. At first he was a little intimidated by coming to a class with women, but if you're a quilter, you've got someone to talk to, no matter what age they are or what gender. It's really great. I love to see that. To see the people enjoy themselves.

Swent: Will the closing of the mine make any difference to you?

Magoon: Well, there are people who have said that they're going to be moving because the mine is closing. There are people I didn't know worked at the mine, or their husbands worked at the mine. There are a number of people that I will regret seeing go, but they're going to all sorts of places all over the country and all

over the world, so I guess that happens with the mining business. But I've enjoyed having them in my classes and enjoyed meeting them.

Swent: Quite a few will be leaving this summer, I think.

Magoon: Yes. Now, I don't think there are all that many right from this area. I think there are different areas, but I do know a number that either will be changing jobs or moving, leaving because of the mine.

Swent: Main Street looks really nice.

Magoon: It is looking well, yes.

Swent: They fixed up the fronts of the buildings.

Magoon: Yes, this is something, actually, we were hoping would happen for years and years and years, so it looks very prosperous. We have a nice, small town. We don't have it spread out so far, so it should be a nice little--we were talking about just painting the fronts of these buildings. I was talking to my landlord and his secretary, I guess, and she was saying, "We're going to call it Little Mendocino. Doesn't that sound good?" I said, "That's wonderful!" So we were talking about putting flower boxes out in front again, because I used to have them. But then some kid lost his brakes and drove up on the sidewalk and ruined my planter boxes.

Swent: Oh, dear. That happens.

Magoon: Yes, we're hoping that it will be a nice little town. But we do appreciate that the mine helped put our street through.

Swent: It's paved.

Magoon: It's paved. They helped bring some things that made a difference to the area. I have a lot of rocks at home that somebody who brought a lot in from the mine--I guess they just had a rock collection--they dumped them out in back when they used to live next door over here, so a lot of them are now in my garden.

Swent: Some of them are very pretty, yes.

Magoon: They're very pretty. I think there was a lot of geologic activity going on in that area in the, well, recent geologic past. It's still a long time ago. But this is a fascinating area for geology. Everything from the mine to the volcano to--

Swent: To diamonds.

Magoon: To diamonds, yes. Well, those diamonds are kind of funny. It's just the silica. I've seen some pretty ones, how they've been cut. My ex sends them off to Germany and has them faceted, and they come back and they're just beautiful, like diamonds, but they're soft so you can't really wear them in a ring. They make nice pins or earrings or something like that. But they're very pretty. But diamonds? Not. Not quite.

Swent: Well, my tape is almost out--is there anything else you want to say?

Magoon: I probably bored you with a lot of this.

Swent: No, no, no. It's really interesting.

Magoon: All kinds of funny things have happened. I think I've enjoyed my life up here more than any other part of my life, I think.

Swent: It's clear that you enjoy it.

Magoon: And I enjoy the people I meet and enjoy having my family close by and, of course, the weather in this area is really beautiful, even though we do have to work at it. I mean, work at getting things improved and so forth.

Swent: It's a nice little town.

Magoon: I think it's a nice town, yes. It's still a good town I had a little thing happen the other day. We were talking about how we are a little community, even though a lot of our stores are closed around here. I was talking to someone, and I said, "Now, look across the street. See those girls? They're sitting over there." They were sitting in the shade of the grocery store, which is closed right now. But it was just, like, two teenage girls, and they weren't being flamboyant or asking for rides or anything. They were sitting there. I'd seen them walk across the street, and I figured they were just resting in the shade, and I said, "Now, I would hope that if anything happened, those girls would come over here and ask me for help, because I'm right here and I feel like this is our community." Well, this lady left that I was talking to, and it wasn't two minutes later, and here come these two guys--

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Magoon: I just went out in front of the store and I put my glasses, which are like half-glasses. I put them on my nose, like this.

[demonstrating] I can look very intimidating when I do that. And I just put my hands on my hips, and I just glared across the street. I was thinking seriously about I should have brought a pencil and paper and written down their license plate. But anyway, I just glared at them. And they kind of looked over and kind of laughed and looked again, and then they backed up and drove the other way. I came back in, and I said, "I think it's okay now, girls. Now you go on, but if anything happens, you just come back, and we'll call 911 and we'll get those suckers!" And after they left, I thought, "That was just like I had been talking about!" It was so funny when it just happens.

I would like to feel that we do have that kind of community, whatever happens, that we're still a small community, like we still are right here. That sounds really corny, but that's the way I feel.

Swent: It's a wonderful way to feel, that people take care of each other.

Magoon: Yes, I would hope that everybody around here feels that way, but, you know, you can just do the best you can.

Swent: I went over once when I was up here. I had some extra time on my hands, and I went over there and drove around the little cemetery, and it's really a lovely cemetery.

Magoon: It's beautiful. There's an old section that I would always take my daughter--we haven't done this for years--on Halloween, and we'd always drive through the cemetery, and I'd say, "You're not supposed to be afraid of people that are dead. You're supposed to appreciate the fact that some day we will all be there, but this is a very peaceful and restful place." The first time that we did this, when she was in high school, and her girlfriend just nearly went out of her mind and "What are we doing? What are we doing?"

I said, "It's all right, it's all right." I think we had a funny tape in the tape player, and I said, "If it bothers you, we'll turn up the radio so you can hear the radio," I said, "but otherwise, let's turn it off and listen for a minute to the quiet that's here." So we did some funny things.

Swent: That's a nice thing to do, I think.

Magoon: I thought it was.

Swent: There is a Magoon family that has the Guenoc Winery. Is that the same family?

Magoon: Well, it must be the same back there someplace, but they are from Hawaii. I do remember my father-in-law saying that there were some Magoons that had gone to Hawaii as missionaries, and then the first governor of Cuba under American rule was a Magoon. And he messed it up because the president--I think that would have been Teddy Roosevelt--wrote to him saying, "You're not going to do" whatever it was kind of thing that he wanted to do. I have this letter that was from those days. Yes, the Magoons were always wanderers, I think. I think they wandered to a lot of different places.

Swent: So your husband wasn't returning to roots when he came up here, then.

Magoon: No, no. We didn't know there were any other Magoons here. In fact, there's a Bob Magoon that lives in Lakeport, who is not related, as far as we know. And there was a Magoon that came through not too long ago, and he was telling me where he was from, and we had no idea about him. The name is so unusual that it's kind of funny to find that many Magoons around here. There have been quite a few Magoons. And they all end up in Lake County!

Swent: Well, it's a nice place. I'm growing to love it.

Magoon: It is nice, and the lake is pretty. The lake is pretty, and the sky is clear, and you can see the stars.

Swent: Yes, that's right. Is there anything else you want to add? This has been very, very nice.

Magoon: Thank you. I hope you got some things for your history.

Swent: I thank you for giving me the time.

Magoon: I enjoyed it.

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Edward McGinnis

WORKER AT THE REED MINE

An Interview Conducted by
Eleanor Swent
in 1995

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> Edward McGinnis, "Worker at the Reed Mine," an oral history conducted in 1995 by Eleanor Swent in *The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, 1978-1997, Volume V*, Regional Oral History Office, The Bancroft Library, University of California, Berkeley, 1999.

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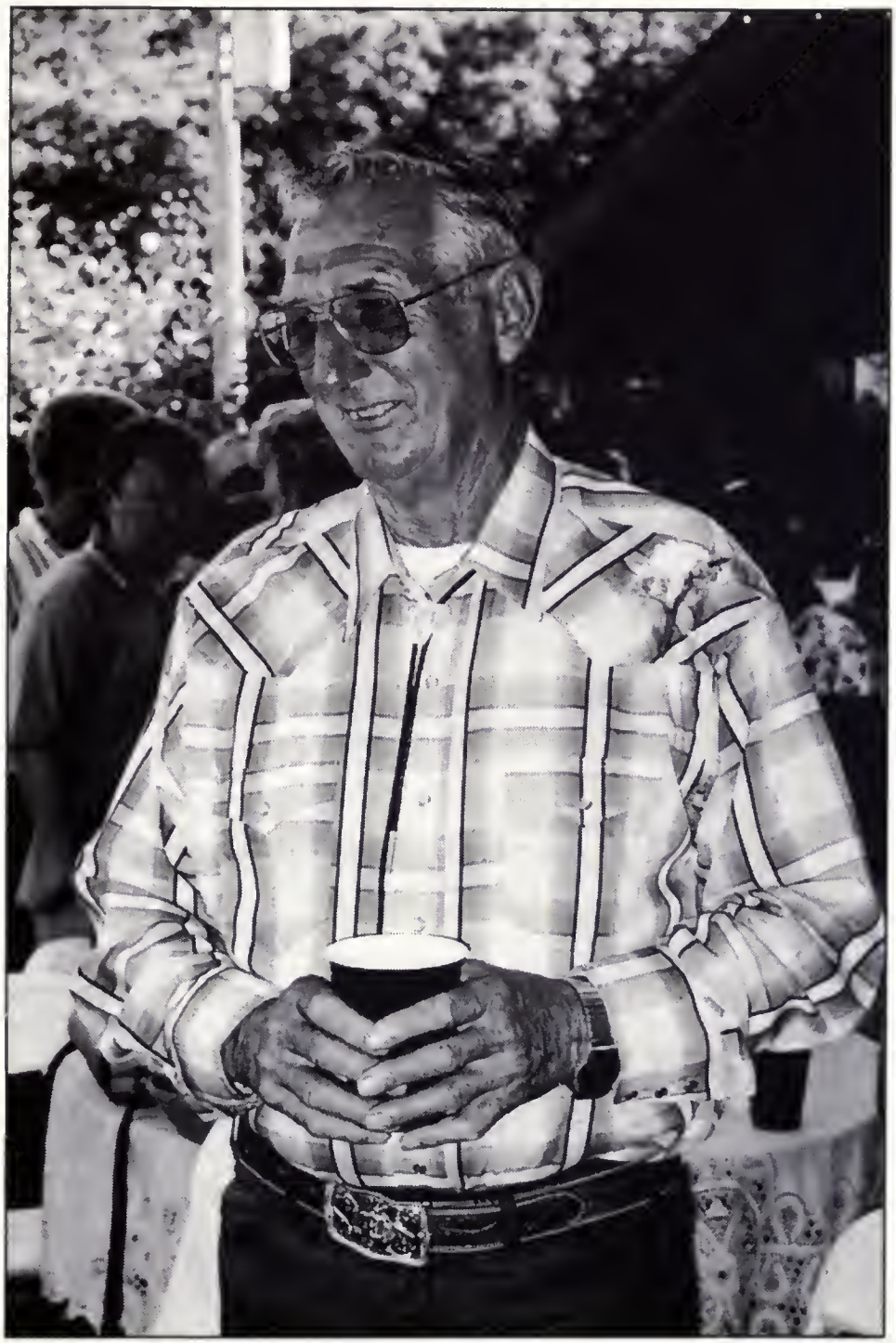

Edward McGinnis, 1996.

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INTERVIEW HISTORY--Edward McGinnis

Edward McGinnis was invited to participate in the documentation of the Knoxville District because he belongs to pioneer families of the area and worked around mercury mines there. His paternal grandfather, Noble Hamilton McGinnis, was born in Tennessee, and came to the Berryessa Valley with his wife after service in the Civil War. A brother-in-law, F. E. Johnston, was already settled in the valley, raising cattle on the property where the Knoxville Mine was located later. Ed McGinnis's maternal grandparents, the Samuels family, were also pioneer ranchers there.

The interview recalls that after graduating from high school in 1941, Ed McGinnis went to work firing the retort at the Skaggs Springs mercury mine. Later he worked as a carpenter and laborer at the Reed mercury mine which operated just before and during World War II when there was a demand for fulminate of mercury. His recollections are of hard work on farms and in mines during the Depression, with minimum safety precautions and few fringe benefits. His father also worked in the blacksmith shop at the Reed Mine, sharpening drill bits. After three years' service with the 10th Mountain Division of the infantry in the Aleutians and in Colorado, McGinnis returned to his home in Monticello until it was destroyed in 1956 by the construction of Lake Berryessa. He says this event "tears everybody up that lived there....everything was either torn down, used for lumber, or burned. Take a dozer in there and push 'em in a pile and set 'em on fire."

McGinnis worked for the Napa County highway department for over thirty-six years. He sometimes went to the Manhattan Mine for loads of slag, until the owner, Bill Wilder, "stopped us from hauling some of that slag. He said, 'Hey, fellows, you can't haul any more of that; there's gold in it.'"

The interview took place on 15 March 1995 at his home on Capell Valley Road, near Lake Berryessa. His wife Barbara is an accomplished craftswoman, so their home displays beautiful examples of her work as china painter and dollmaker, as well as collections of thimbles, figurines, and mineral specimens. A grandfather's saddle, at least seventy-five years old, decorates the breezeway near the front door. I visited again on 26 October 1998 for a final review of the transcript, and on this occasion, as we drank coffee and ate home-made nut bread, we watched a deer grazing; this led to recollections of grandfathers who hunted necessary meat for the winter. I learned that their son Ronnie, who works for the Bureau of Reclamation, is a genealogist and history buff who has researched the family's roots. He is also much interested in Captain Swift, a participant in the Bear Flag revolt who is reputed to have buried a cache of gold which motivates weekend prospecting.

The tapes of the interview were transcribed in the Regional Oral History Office and the lightly edited transcript was sent to Ed McGinnis for review. He made minor changes for clarification and returned the transcript promptly. The manuscript was corrected and indexed at our office. The tapes are deposited in The Bancroft Library and are available for study.

The McGinnis interview is one of more than forty interviews which were conducted by the Regional Oral History Office from 1993-1998 in order to document the development of the McLaughlin gold mine in the Knoxville District of Lake, Napa, and Yolo Counties, California, from 1978-1996, as part of the ongoing oral history series devoted to Western Mining in the Twentieth Century. The Regional Oral History Office was established in 1954 to record the lives of persons who have contributed significantly to the history of California and the West. The office is a division of The Bancroft Library and is under the direction of Willa K. Baum.

Eleanor Swent
Project Director, Research Interviewer/Editor

Regional Oral History Office
The Bancroft Library
University of California, Berkeley
February 1999

Regional Oral History Office
Room 486 The Bancroft Library

University of California
Berkeley, California 94720

BIOGRAPHICAL INFORMATION

(Please write clearly. Use black ink.)

Your full name EDWARD HAMPTON McGINNIS

Date of birth 12/29/23 Birthplace ARBUCKLE CA

Father's full name EDWARD VALINTINE McGINNIS

Occupation RANCHER Birthplace BERRYESSA VLY NAPCO PUNKIN RIDGE

Mother's full name IRMA F SAMUELS

Occupation HOUSE WIFE Birthplace MONTICELLO CA

Your spouse BARBARA RUTH BORGES

Occupation HOUSE WIFE CLERK Birthplace

Your children RONALD JAMES BARBARA JEAN CAROL ANNE

Where did you grow up? BERRYESSA VLY

Present community MONTICELLO Ca. BOTTOM OF LAKE BERRYES

Education 12TH GRADE

Occupation(s) EQUIP OPERATOR. NAPACO Rd DEPT ROAD MAINT CREW FORMAN NAPACO Rd DEPT

Areas of expertise

Other interests or activities

Organizations in which you are active V. F. W.

INTERVIEW WITH ED McGINNIS

Pioneer Families in the Berryessa Valley

[Interview 1: March 15, 1995] ##[1]

Swent: Edward McGinnis is interviewing at his home on Capell Valley Road in Napa County, on March 15th, 1995.

McGinnis: I've got a little rundown here.

Swent: Oh, you came prepared. All right, let's see.

McGinnis: It's a kind of little rundown before I went to work. You probably can't read my writing.

Swent: Yes, I can. [Reads document] Oh, this is very helpful, so let's just follow that. There are a lot of Scots people that were around Monticello, weren't there?

McGinnis: Yes, Mackenzies, and MacDonald, McGinnis.

Swent: How did your family come to be here?

McGinnis: Well, my grandfather, Noble McGinnis, lived in Neosho, Missouri, before the Civil War. He was in the Civil War, and that part of Missouri was right on the line where Confederates on this side and Yankees on the other side. When he came back from the Civil War, all this looting and stuff going on, so that's the reason they left there because they were supposed to have real good farms in Missouri. They left there right after the Civil War and went to Texas, and he came to California in, probably about 1865 or so, a little after that. After he was out here, he sent for his wife, and they had one child at that time. They came, my dad always said, around the Horn, but they may have walked across the Isthmus of Panama, and they came by ship into San Francisco.

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[1]## This symbol indicates that a tape or tape segment has begun or ended. A guide to the tapes follows the transcript.

My grandmother's brother, F. E. Johnston, had a ranch up here. That's how they got located in the Berryessa Valley.

Swent: They were real pioneers, weren't they?

McGinnis: Yes, yes. I don't know what year the Johnstons came, but a few years before that.

Swent: And they were ranching in this valley over here?

McGinnis: Yes. They got a ranch in Berryessa Valley, yes. Over the years my dad and two brothers and sisters owned the ranch in Berryessa Valley. Well, my dad got out of it sometime in the late twenties, but his brothers and sisters owned it until about fifteen years before the lake went in.

Swent: So mostly they were ranchers, but then you said that your grandmother's brother, F. E. Johnston, also--

McGinnis: Was a lawyer.

Swent: He was a lawyer. And also owned the Knoxville Mine at one point.

McGinnis: Yes. Yes, he owned quite a bit back in them days, I guess.

Swent: Do you know, was he operating it as well?

McGinnis: I don't know for sure whether he operated the mine or not or just used it for grazing cattle, probably. But they may have run it then.

Swent: Did you know him? Do you remember him?

McGinnis: No, he was long gone. I never knew my grandparents, either. They're both dead. I don't know. Some of the people didn't live too long back in them days. He [Noble McGinnis] was only fifty-some years old when he died, and she lived a little longer than that.

Swent: Was your mother's family from around here, too?

McGinnis: Yes. They was pioneers, too. Samuels. They came out in the early days. I don't know just when, but they wound up down out of Vacaville when the family lived up on Blue Ridge, which is this ridge that overlooks both ways. And from there they made it on to Berryessa, where they had a ranch up there.

Swent: Mostly cattle, I suppose.

McGinnis: I did have a family tree thing on that, but I have to see if I can hunt it up.

Swent: Where were you born?

McGinnis: Arbuckle, California, in 1923.

The Destruction of Monticello, 1956

Swent: And you grew up around Monticello.

McGinnis: Oh, yes. Lived here all my life, except for, well, except for three years in the army in World War II. And then when the Bureau of Reclamation put the lake in [Lake Berryessa], we had to move in 1956.

Swent: You felt pretty bad about that?

McGinnis: Oh, yes, yes. Tears everybody up that lived there. I worked for Napa County Road Department in Monticello, and they moved six houses out of the lake for employees to live in because there was no place to live in at that time. And I just moved into one of them for some fifteen years, until I bought this place. They moved houses out of Berryessa Valley up to Spanish Flat. They got a corporation yard in there, but the houses are all gone now. The county didn't want to be in the renting business. They had tore all the houses down and burnt some down, and one was moved, and that's the one across the creek here, and just boat storage.

Swent: Well, I've seen some of those pictures of burning some of the houses. And then were some of the buildings just flooded, drowned?

McGinnis: They did something with all the buildings and the trees and the brush and everything was either torn down, used for lumber, or burned. Take a dozer in there and push 'em in a pile and set 'em on fire. And the trees, all the trees and everything was burned.

Swent: There must have been a lot of beautiful gardens and trees.

McGinnis: Yes.

Swent: You graduated from high school, then, in 1941.

McGinnis: Winters.

Swent: You had to go to Winters for high school.

McGinnis: Yes, well, that was the closest. We just went down the canyon to where the dam is. The road went right practically at the bottom of the creek. That's where the dam is now. It was only nineteen miles to Winters.

Swent: Did you drive every day?

McGinnis: No, we had a school bus.

Swent: All right. But I mean you stayed at home. You didn't stay in town.

McGinnis: We stayed at home, yes. Yes, it was quite a little trip!

Firing the Retort at the Skaggs Springs Quicksilver Mine

Swent: You said that you started working before you graduated from high school, actually, didn't you?

McGinnis: Well, yes, I worked some. Then in 1941 after I graduated, I worked on another quicksilver mine over by Skaggs Springs, firing the retort, before I went to work at the Reed.

Swent: You were firing the retorts?

McGinnis: Yes. Retorts was just where they put the ore in trays and put them in a big, like a bakery thing and it cooked the cinnabar into mercury. It went into vapor, then it would condense and went back to liquid.

Swent: How much was it broken up before they put it on the tray?

McGinnis: I'd say about inch-and-a-half, two-inch broad before it was put in the trays.

Swent: How did they break it up?

McGinnis: In a crusher. On the bigger operations they had a furnace that was on an incline. That heated up real hot, it was fired by oil, and they fed the ore into it and that kept revolving until all went through, and it cooked the mercury that went to vapor, and then they had the big condensers, and all that smoke went

through, and mercury would run down into pots underneath these condensers.

Swent: But that, you said, was only at the larger mines.

McGinnis: Well, yes. The retorts, they couldn't run very much through a day with these. Well, Reed Mine, Knoxville, and Manhattan, they all had the furnaces. After Manhattan shut down, the furnace was taken to Skaggs Springs. I don't know if it was completed for operation.

Swent: I see. A retort is a smaller arrangement than a furnace?

McGinnis: Yes. In the old days they built it up out of fieldstone rock around a metal enclosure, then built a fire in the fire box.

Swent: What did they use for fuel?

McGinnis: Wood. They cleared off all of the cedar trees and the oak trees and everything else around Knoxville and the Manhattan Mine back in the 1800s to get wood to--I suppose they could use some of the brush!

Swent: Tell me a little more about Skaggs Springs.

McGinnis: As I remember, Henry Herman was foreman in putting the furnace together at both Manhattan and Skaggs Springs. MacCracken was carpenter.

Swent: I know you didn't work in the mine, but do you remember how many people were working in the mine?

McGinnis: Well, that one at Skaggs Springs, they were trying to get it started, but they never did really get going in full swing, so we didn't really have enough ore or something like that. But the Reed Mine and Knoxville I'd say there was probably, like, a hundred people in each place.

Swent: Those were big ones.

McGinnis: Yes. At the Manhattan, they put a furnace in there, and I don't know why they never could find any good ore or something. They never made it. I think they got the furnace from McKenzie's at Manhattan. But there was quite a few people worked there.

Swent: When are you talking about? What period?

McGinnis: I'm talking about during World War II. And just before and afterwards.

Swent: But there must have been a lot of little mines around, too.

McGinnis: Well, yes. There was one that they called Red Elephant, just northeast of Manhattan, and Harrison Mine was just next to Manhattan Mine. Well, in that area, that's the Knoxville area, that's the only one I can remember. There was some over in Lake County, but I can't think of the names right now. Mirabel was one. Then there was another one over there. I can't think of the name of it, either, right off hand.

Swent: What about the Oat Hill?

McGinnis: Oat Hill, yes. And there was another one, but it was so hot in the tunnels that they could only work in there so long and they'd have to come out. The stuff is still baking or something in there. Sulphur Bank.

Swent: Sulphur Bank, oh, yes. That was the hot one?

McGinnis: Yes.

Swent: When you were a boy, was this a job opportunity in the summer?

McGinnis: Well, no. I never worked up there as a boy. I worked up there right after I graduated from high school.

Swent: I see. I thought maybe the boys worked in these mines in the summer.

McGinnis: No, no. Not during my time. All the miners had to know pretty much what he was doing!

Swent: But you did help around the retort, you said.

McGinnis: Well, yes. That one mine I worked the retort, but at the Reed Mine I worked as a carpenter's helper.

Swent: Yes, and we'll talk about that in just a minute, but I was just trying to get a sense of--in the late 1930s what did young boys do for a job?

McGinnis: Well, it was just all ranch work. Of course, they had fruit and prunes.

Swent: Were there pears, too?

McGinnis: Pears. In Berryessa Valley. And I picked prunes, I can remember, for less than ten cents a box at that time. Well, that's what the young people did in them days.

World War II and the Demand for Mercury

Swent: So was the mining considered sort of a separate thing out there?

McGinnis: Yes. Well, it was shut down, see. All them mines was shut down until World War II, and say, about 1939 they started gearing up things for World War II, and they wanted that mercury, and they got bids for the federal government to come in and help Napa County with the road going from Monticello to Knoxville, because everything in that period come out through Napa County. Now, this other Homestake mine went the other way, because Napa County didn't want any heavy hauling going out over the Berryessa Road. But Homestake fixed Lake County side of it pretty good. You know, paved it all the way up there.

Swent: Looking back at it, were you aware that this was getting ready for a war?

McGinnis: No. I really didn't think that much about it, but then, after getting closer you could tell. They used that mercury making ammunition or something. I don't know what they used it for, really.

Swent: But the government was involved?

McGinnis: Oh, yes. They helped widen the road different places and graveled the road all the way to Knoxville. They got the gravel out of Putah Creek in the valley there and hauled it up there.

Swent: This is the road from Monticello.

McGinnis: Yes, from Monticello, from the other end of the valley there, about fifteen or twenty miles that they was graveling. None of it was paved in them days.

Swent: They were shipping supplies in and mercury out.

McGinnis: Yes.

Swent: Then where did it go from Monticello?

McGinnis: From the Reed Mine the trucks hauled the mercury out to Sacramento. They had a truck that run about twice a week for supplies and hauling the mercury.

Swent: Were they just the standard small flasks?

McGinnis: Yes, seventy-six pounds or something like that.

Swent: And they had a couple of trucks a week?

McGinnis: Well, the same truck.

Swent: Yes, but it went two trips a week.

McGinnis: Well, yes, they'd haul supplies in and--they made a lot of it. It was Knoxville and Reed Mine both put out a lot of mercury during World War II. I don't know how much.

Swent: Well, we could find out. But you were aware of what was happening.

McGinnis: Oh, yes.

Swent: Was there a lot of talk about the mercury miners, or the people that worked in the mine or at the furnace getting sick?

McGinnis: Yes. Well, I heard about that at the Reed. The first ones to work there really didn't know anything about it. They was people worked on them furnaces especially. They were the ones that got the fumes. Made their teeth fall out, their hair fall out. So it wasn't good.

Swent: Did you know anybody that had this happen?

McGinnis: Well, yes. There was, well, Hales from Lower Lake. Two brothers. One of them fired furnaces, and I think that's what happened to him. His brother Howard was a mechanic and worked in the blacksmith shop.

Swent: When you worked at Skaggs Springs, did they tell you to be particularly careful around the retort?

McGinnis: Nobody would tell you anything! [laughs]

Swent: Do you remember how much you were paid there?

McGinnis: [pausing] I think probably it was about seventy-five [cents] to a dollar an hour.

Swent: Did you live there? Did they have a bunkhouse?

McGinnis: Yes, we lived there.

Swent: What was it? What kind of arrangement?

McGinnis: Well, they just had sort of small houses built around, but the Reed Mine had the boarding house.

Swent: Yes. I want to talk about the Reed Mine, and then--tell me about the Skaggs Springs Mine first.

McGinnis: Well, they had families that were at that mine. There was the family of Bud Davis, George Davis's brother. I only worked there for, I'd say it was only about three months, but they had little houses. Maybe half a dozen houses right in there that they lived in.

Swent: So you just rented a room in a house? Was that the arrangement?

McGinnis: Yes. Well, I lived with a family, my friends, Bud and George Davis, Arch MacCracken, and their mother, Jane MacCracken.

Swent: Did you eat with them, too?

McGinnis: Oh, yes.

Swent: The company didn't provide a bunkhouse.

McGinnis: No, no.

Swent: And you were just firing the retort.

McGinnis: Yes, that's all I did.

Swent: What did you have to do?

McGinnis: Well, we had to load the trays and watch the temperature on the retort, it was fired by oil, which wasn't no big job, you know, keeping it at the same temperature, and then after they cut the fuel oil--and I can't remember how long it was, I'm thinking it was probably about twelve hours--had to reload the trays. And that mercury would come out of the retort over a part that had water running off into cast iron pots. I didn't have to do anything with those; they took care of the mercury.

Swent: Do you think you were at any risk for getting exposed to mercury?

McGinnis: Well, I don't think I am. I don't really believe I am because I never worked that long around the furnaces. But Knoxville and Reed Mines--Knoxville had a pipe, and I don't know. Must have run from a mile. The fumes off that thing went clear to the top of that ridge. In a pipe. Reed Mine was in kind of a canyon. I don't know if you've been up there.

The Reed Mine

Swent: Well, I've seen where it is up there. So, yes, I would like you to tell me about it.

McGinnis: The furnace was up on the east side of this canyon.

Swent: It's a pretty steep canyon.

McGinnis: It was steep, and the bunkhouses was also built up on that side. And boarding house. So there wasn't too much difference between that. But their smokestack went all the ways up the hill, too, but I suppose that's been settled back in now. I never really thought about it at that time.

Swent: Did the smokestack have mercury in it, too?

McGinnis: Oh, yes. If the furnace wasn't running right, they'd lose a lot in the smokestack. They never really could get 100 percent. I think there was always some going out.

Swent: The Knoxville Mine. Was it older and bigger, more successful, than the Reed Mine?

McGinnis: Yes, it was, yes. I think that's where they first found the cinnabar, was when they were building that road right there at Knoxville. I guess in the olden days took out more than any of them in that area, as far as I know. But Manhattan was also a good mine in the old times.

Swent: Do you think your great-uncle knew that it had a potential for a mine?

McGinnis: Oh, I suppose. I don't know.

Swent: Were there stories in the family about it?

McGinnis: I haven't never heard them talking about running the Knoxville Mine. He may not have at that point. I don't know.

Swent: He must have sold it.

McGinnis: Probably, yes.

##

Swent: Well, I'm more interested in what you really remember about it. But by the time that you knew this area, now, you said that your father was working there, too? At the Reed or at the Knoxville?

McGinnis: At the Reed Mine.

Swent: He worked at the Reed Mine. I'm trying to keep it straight here.

McGinnis: For about two or three years.

Swent: You said in 1939.

McGinnis: Well, that's the first I can remember them getting started up there. Now, Knoxville Mine was going to get ready before that, but in '39 it was a year or so after that a friend of mine moved up to the Reed Mine.

Swent: And this is George Davis?

McGinnis: Yes. Well, things were pretty hard times, anyhow, the Depression. And he was looking for a job, and they went up there and they lived in a tent for a while. And I helped them move some stuff they had up there. And a road used to go to the Knoxville Mine and up that away, but it never was a really county road on the Yolo County side. But Knoxville let them go through that way, and they built their own little houses.

Swent: There wasn't anything there of a settlement before that?

McGinnis: No, no. The company furnished the lumber and they threw up their own little houses.

Swent: Was this the Bradleys?

McGinnis: Yes, the Bradley Mining Company started working, but then later on they had the Stouffer Company come in. The Bradley Mining Company, that's who I worked with, built a couple of clean

houses from the ground up and fixed up quite a few of the other houses that people had built.

Swent: What kind of houses were they?

McGinnis: Oh, it was just mostly two-bedroom houses built out of rough one-by-twelve boards, rough boards.

Swent: What kind of construction did you use? How did you put them up? Did you frame them?

McGinnis: Oh, yes. We framed it, yes. It was all rough lumber, but it was framed. The ones that people put up there first, they just made kind of a box frame, just anything to get going.

Swent: Did they have foundations?

McGinnis: Just on rocks and post.

Swent: Did they have to dig into the hillside?

McGinnis: No, they just used a post and come up to a wall. It wasn't very permanent, the first ones. Some of the people just lived in tents, just did like they did in the old days.

Swent: But the ones that you built, were they more permanent?

McGinnis: Oh, yes. Yes, they was pretty nice houses. You know, nothing elaborate, but--.

Swent: What did they have for plumbing?

McGinnis: Well, it was all plumbed, galvanized plumbing, and they got their water out of Davis Creek, which was a creek at the bottom of this canyon where the mine was.

Swent: The mine was down lower?

McGinnis: The mine was down in the bottom--the tunnel that went in the hill.

Swent: Because what I saw were the dumps that were way up high.

McGinnis: That was the dumps out of the furnace.

Swent: So they mined down below.

McGinnis: The mine was up the canyon from where that dump was, and there was a tunnel run in going westerly. That's where they went in.

Swent: And the houses were up?

McGinnis: The houses were on the west side of that canyon also. The ore came out of the mine and they had a little railroad track, the ore cars, and it come down to where the blacksmith shop was. That's where my dad worked. And he hooked the ore cars onto a cable that they had, a winch, to pull them ore cars on the incline up to the furnace. That's how they got the ore up there.

Swent: Why did they have it up so high?

McGinnis: I don't know. For one thing, it was the dust, to get rid of the material. That would be one reason, but I don't know why, whatever reason it might be. I was going to say maybe that they'd get away from some of that mercury fumes. I don't know. I had never really thought about that.

Swent: Did they dump waste rock at the beginning and then also the waste at the end?

McGinnis: No, the waste rock--well, I think they dumped that up the canyon there someplace. I don't know. I can't remember now, but the ore came down there, and they took it up the hill on the incline. And after it was burnt they just hauled it out there on the dump and let it fall in.

Swent: Your dad was in the blacksmith shop, you said.

McGinnis: They sharpened tools, and they also had compressors in there. They had three great big Cat [Caterpillar] air compressors and two GMC diesels. You couldn't hear yourself think from the noise. [laughs] And then they ran twenty-four hours a day, too. Day and night. Of course, you finally got used to the noise. [laughs]

Swent: What did they use for fuel?

McGinnis: That was diesel.

Swent: And that all came in by truck, of course.

McGinnis: Yes.

Swent: From Monticello, again, I suppose.

McGinnis: Well, I suppose, probably, from Winters. I don't know. They could have brought it in from Lower Lake, but I don't think so.

And the furnaces was run with some kind of a fuel oil, too. It took quite a bit of oil.

Swent: So the company provided the water for the housing?

McGinnis: Yes, they provided everything.

Swent: Power, electricity?

McGinnis: Well, they got electricity off the generators, see. Gamble put his power line in, in 1939, when he owned the Knoxville, so they could have power for the mine.

Swent: Where did he get it from?

McGinnis: They took it off of the PG&E line at the end of the lake. At that time, electricity was for the ranch house about a mile from the other end of the valley. I don't know whether you know it; it's on the left going toward Knoxville or--there's a ranch there, just three little houses. Been there for eighty years. That's as far as electricity went, just to the end of Berryessa Valley. That's where it stopped. And Gamble put in his own poles and line to go on to the mine. But it was hooked up to PG&E.

Swent: But the Reed had to provide their own.

McGinnis: Yes. Later on, just before it shut down, I guess, they run the line on in there. I wasn't around there from '43 till '46.

Swent: Did your dad continue to work there?

McGinnis: Yes, he was there till it shut down in, I don't know, just '46, I think. He worked there until '46. The Reed Mine did operate with a different company during the Korean War.

Swent: Did your dad continue to ranch at the same time?

McGinnis: No, he sold his interest out to his brothers before that, so he wasn't in that.

Swent: What happened to your friend, George Davis?

McGinnis: After that shut down, he went to Shingle Springs. That's just this side of Placerville. He worked at a limestone mine.

Swent: So he stayed with mining then.

McGinnis: Yes, until he had a heart attack and died. But then miners--I don't know why, they wouldn't work anyplace else after they got started. They wanted to be underground. The temperature was the same all the time, they said.

Swent: I guess the mercury mining wasn't particularly dangerous, was it?

McGinnis: Well, it was all dangerous.

Swent: Well, but I mean in the mine there weren't the fumes.

McGinnis: No, I don't think so, no. Unless it would have been in that Sulphur Bank mine, because they didn't have no fumes. They did have lots of water that come in over that, that dripped on you all the time off of that.

The only time I ever worked in the mine was one Fourth of July night, at the Reed. This friend of mine, George Davis, was a miner, and his people went to town, and never got back, so he was looking for somebody who was a mucker. So I says, "Okay." So we get in this ore portal to take in the ore cars to work, and this fellow that was running this little locomotive, electric, probably, he pushed the cars in. We was in the cars. And he'd reach over and get a little rock and throw it and hit me on the helmet with it. [laughs] He got a big bang out of that! But I didn't think it was very funny!

Swent: He was trying to scare you?

McGinnis: Yes. And then I went in there and worked with my friend. What they done, they drilled in--they mucked out the muck that was blasted down from the other shift.

Swent: This was by hand?

McGinnis: By hand you would muck that out. They drilled these drills the next five feet, I think, at a time. They had to drill so many holes. And load them and shoot them in that shift, and then they left that lay there for the next shift to come in. And that had to be timbered up too, about every five feet, I think, to put these sets of timbers in.

Swent: What kind of drills did they have?

McGinnis: They was air drills.

Swent: Did they have the jack-leg drills yet?

McGinnis: Yes, we had that. I forget what you call it. Bar. They put the air hammer on it to drill holes. They had a bar. I forget what you call that, and it was fastened by screwing both ends up into this drill, air drill, and was mounted on that bar, so they didn't have to hold it up there to drill.

Swent: And they sharpened the drill. That's what your dad was doing.

McGinnis: Yes. They sharpened the drills down at the blacksmith shop. They had a kind of machine arrangement to sharpen them. The picks, they had to sharpen by hand.

Swent: That's a noisy business, too.

McGinnis: Yes.

Swent: So you did this one shift as the mucker?

McGinnis: That's it!

Swent: That was enough?

McGinnis: Water, like I say, that water running off the top and dripping down you all the time. And they had a shower and change room when they came out of the mine, right at the portal of the mine. They went in and took a shower and changed their clothes, and they just hung up their clothes that they used to work in the mine. And they didn't last very long on account of the mineral or whatever it is. They just kind of rotted. [laughs] Well, I don't know if that water was any good for you or not.

Swent: Maybe not. What kind of clothes did they wear?

McGinnis: Oh, they just wore regular Levi's or something like that.

Swent: Did they have safety boots?

McGinnis: Oh, yes. They wore boots, yes. They had boots, yes. Safety boots and hard hat and all that stuff, yes.

Swent: Hard hats before the war?

McGinnis: Oh, yes. The miners always had hard hats, yes.

Swent: Even before the war?

McGinnis: Oh, yes. They had that hard hat that had the light on it, you could mount a light on it. Used to be carbide, but they used--even then they had electric lights, yes.

Swent: Oh, that was pretty up-to-date then.

McGinnis: Yes.

Swent: Were there mine accidents?

McGinnis: I don't really remember too many accidents. As far as I know, there was nobody killed at the Reed Mine. In later times, I can't remember of any at the Knoxville. There was one person killed at Manhattan. He was a dozer, making a cut, and I guess that slid in on him.

Swent: In an open pit?

McGinnis: Yes. That's the only real bad accident I can remember. Of course, there could have been more.

Serving in the Infantry, 1943 to 1946

Swent: So you left in 1943. Then you went off into the army. Where were you in the war?

McGinnis: Well, I was in the Aleutian Islands.

Swent: The whole time?

McGinnis: No, not the whole time. I was only there for less than year, I guess. I was in the 87th Mountain Infantry Regiment, which turned out to be the 10th. We came back and that was the forerunner for the 10th Mountain Division, the ski troops. Up at Leadville, Colorado. And I was transferred out of there on account of the back problem I had up in the Aleutians before they left. They went to Italy. I was lucky. They had a lot of casualties.

Swent: Did you go to Leadville?

McGinnis: Oh, yes. I was up there with them about a year before I was transferred out into limited service. I spent the rest of the time guarding German PWs [prisoners of war].

Swent: Where was that?

McGinnis: Camp Hale, Colorado, which was up at Leadville. And Greeley, Colorado. They had a bunch there.

Swent: How did you feel about that?

McGinnis: We had to take them out in eastern Colorado. They picked corn. They'd give you a carbine and fifteen rounds of ammunition, and you had fifteen prisoners. But they wasn't trying to get away. Most of them people were just like they was drafted into it. Of course, some of them wasn't. The SS troops. They kept them to themselves.

Swent: Did you get acquainted with any of them?

McGinnis: Well, some of them could speak English. I didn't speak German. Yes, I talked with them. Like I say, you'd take fifteen of them out every day and guard them while they worked. Fact is, when they was getting them ready to take back to Germany was when they was trying to get away. A lot of them didn't want to go back. But I never had no problem with them, or we never did, anyway. Except a couple of them got away up at Camp Hale one night and took off, and the railroad went right by, and going up the grade, they had to slow it down. They were slow, and they thought they'd jump on a freight. And they sent us out looking for them, and the sergeant had a staff car. A whole bunch of us went up the railroad to the towns, and I climbed on this water tower and was looking down in the freight cars, the box cars, that went by. Here were these two guys were sitting there, Germans. I hollered, "There they are, in that car!" He took his staff car there and went down the road and flagged that freight train down, and they crawled up in there, and two hobos came out! [laughs] The two guys that got away got cold that night and come back to camp.

Swent: So they didn't escape after all.

McGinnis: No. Well, they did, yes.

Swent: But they came back.

McGinnis: Yes.

Swent: So you were there until, actually, after the war. When did you get out of the army, then?

McGinnis: 1946, March 1946.

Swent: Quite a while after the end of the war.

McGinnis: Yes.

Swent: Were you still single?

McGinnis: Yes.

Swent: So you didn't have much priority for getting out.

McGinnis: I didn't get married till, well, I wasn't home very long. [laughs]

Swent: You came back here, then.

McGinnis: Yes, to Monticello.

Swent: Is that when you started working for the county?

McGinnis: I worked for a ranch for a little while.

Swent: For whom?

McGinnis: For a lot of ranches in the valley. After I got married, I had to go to work. Anyway, I worked for a ranch for eighty cents an hour. And then I got a job as a carpenter in Lake County, building veterans' housing. I don't know if it was barracks or what it was that they took apart in pieces and hauled it up by freight train, and we put them back together. I worked at that for six months or so.

I was working for the PG&E on the power line after that, from Winters to Santa Rosa. For a while I went to work for Napa County, and I worked for them for thirty-six and a half years.

Swent: And that lasted a long time. What did your dad do after the mine closed?

McGinnis: He was at retirement age after he worked at the Reed Mine, so he just retired.

Health Care and Benefits for Mercury Miners

Swent: Did they pay any kind of retirement pay?

McGinnis: Well, he had Social Security. You really didn't get too much from that. He lived with us practically for the rest of his life, quite a while.

Swent: Companies didn't give you a pension then.

McGinnis: No. Well, he never worked with them long enough. Of course, I got a pension off the county. Public Employees Retirement.

Swent: Right. What about the Knoxville Mine? What sort of conditions did they have for their workers, do you know?

McGinnis: It was just by the hour, and I don't think there was any pensions or nothing. Wasn't but Social Security.

Swent: Not in those days, right.

McGinnis: Back in them days, you know, Social Security was really something. It wasn't very much, but you could buy a lot more with it.

Swent: What did these mines do for health care if there was an injury, for instance? What happened?

McGinnis: If people was injured?

Swent: Yes.

McGinnis: I don't really know. I suppose that they must have had something then that they had to take care of once there was an injury, I would imagine.

Swent: Where would you have gone?

McGinnis: You had to go to the nearest--from up there, the nearest place would have been over in Lake County, a hospital, or to Napa. That would be the nearest place.

Swent: Do you remember anybody being hurt?

McGinnis: No.

Swent: You had to stay healthy!

McGinnis: I can remember I hurt myself. I was getting a board off the side of a house, and it glanced off and hit me up in the eye, and I thought I had put my eye out. So they took me on to Lower Lake to a doctor, and it was nothing serious. Just the

blood was running into my eye. So there was more injuries, but I don't really remember.

Swent: Did the women stay there to have their children?

McGinnis: No, they went out to the hospital, as far as I can remember.

Swent: Where were your children born?

McGinnis: My first one--he's almost fifty years old now--in Woodland. Our doctor was in Winters, and they went to Woodland. One of my daughters was born in Woodland, and the youngest one was born in St. Helena Hospital.

Swent: Quite a ways to go.

McGinnis: Yes, yes. My son was born January 1st, 1947. I had an old 1936 Dodge car, and my wife, just before midnight, started saying that we have to go to the hospital.

Swent: New Year's Eve.

McGinnis: They had a hotel and bar in Monticello and had a big party going on in there, and I had to stop there and get gas. And it was twelve o'clock, midnight. No, it was even before. And I went to Winters, and the doctor was out at a party, so I took off to Woodland, and my wife would say, "Stop! Stop!" And I slammed on the brakes. She says, "No, not you; the pains!" And we got to Woodland, the hospital, and I didn't know enough about going to the emergency room. They had the front door locked, and I was about to break it down. Finally, this nurse come out and let us in. My wife was only there about fifteen minutes. [laughs] I was lucky!

Swent: What did people do for entertainment at these mining places? Did they go to town, or did they do things up there?

McGinnis: Yes, they went to town. They had baseball teams at the Reed mine. I suppose they had softball, too. They played baseball, stuff like that.

Swent: Where did they have a baseball diamond?

McGinnis: There was a flat, south of the Reed Mine, where that lake is now.

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McGinnis: Up near the mine about half a mile or so, there was a big flat up there where they had the baseball team, where Homestake has the reservoir now. Also a road went through that flat and down to Cache Creek and Rumsey. There was a little road that went, you could go out that way in the summertime. And an old guy lived in a cabin up there, Tom Taylor. After the mine shut down, he was there for a long time.

Swent: Stayed up there all alone?

McGinnis: He was a cowboy, yes. Had cattle in there. There was another fellow, stayed at the Reed mine, and then the Knoxville, after they had shut down. And they done a little what they call high-grade afterwards. A fellow named Wilson; of course, him and Tom Taylor, they were friends.

High-Grading the Old Mercury Retorts

Swent: He was one of the people involved in the Manhattan, too, wasn't he?

McGinnis: Yes. He also went in with his partner, Bill Hickock or Hitchcock was his name. They did a lot of high-grading around the retorts at Manhattan and Knoxville, both.

Swent: When you say high-grading, do you mean stealing?

McGinnis: No, no, I mean to hand-pick the high-grade ore.

Swent: No, no. Because sometimes it means stealing.

McGinnis: They came in and dug down where they saw that mercury go into a pocket. And they found a lot of it, you know, where you could just scoop it up and put it in a bottle. The liquid. And then they also--they call it high-grade now--for the rich body of ore, you know. They never took anything but the rich part.

Swent: Not working the low grades but just the high grades.

McGinnis: The high-grade, yes. They used a retort to get the mercury.

Swent: It wasn't stealing. I wanted to make that clear, because sometimes they actually owned the property that they were working, or leased it.

McGinnis: I shouldn't have called them high-grade.

Swent: No, no. That is the term they use. But it has different meanings sometimes. So he actually still owned the property, or leased it maybe?

McGinnis: No, he just leased it. He was up at Manhattan a long time. I forget how long, but--

Swent: Made a living on it, anyway.

McGinnis: Yes.

Swent: What did the women do for entertainment at the Reed Mine?

McGinnis: There wasn't much entertainment.

Swent: I wondered if you knew. Did they get together? Did they have any little clubs?

McGinnis: Oh, they didn't have no clubs. Of course, they got together during the day.

Swent: What did people do? Did any of them go out to church?

McGinnis: Well, I don't remember. I suppose they could have; some of them did.

Swent: Was there a lot of drinking?

McGinnis: Oh, it was quite something, yes. On weekends.

Swent: Just on weekends?

McGinnis: When they went to town on Saturday night or something like that. Whooped it up a little.

Swent: What about out there? Did you call it a camp? Or did you call it a town?

McGinnis: Well, it was just something in between, I guess.

Swent: At the mine, was there drinking there? Did they drink at home?

McGinnis: Oh, I suppose some of them did. I can remember drinking beer. I don't remember too much, but I suppose they did.

Swent: Was there any sort of bar or anything there where the men could go after work?

McGinnis: No, not at Reed Mine.

Swent: Was there a company store?

McGinnis: Knoxville did have a little store thing in that big building there. At one time. They had a store for a while. Not very much stuff. Everybody either went to Lower Lake or Monticello to buy things.

Swent: There was an elementary school at Reed, wasn't there?

McGinnis: Yes. A carpenter put that building up, the school building. It was a sort of fabricated thing from someplace.

Swent: Oh, it was a pre-fab.

McGinnis: Yes. I don't know if the floors were that way, but I can remember the sides was pre-fab. I think just the sides was pre-fab. The roof wasn't, anyway.

Swent: What kind of roof was it?

McGinnis: It was just a rolled roof of asphalt paper. It did have hardwood floors, though. I don't know why.

Swent: How big was it?

McGinnis: Oh, I'd say it wasn't probably twelve or fifteen feet wide and twenty-five feet long or something like that.

Swent: One room?

McGinnis: Yes. It might have been longer than that.

Swent: But just one room.

McGinnis: Yes. They had a school at Knoxville for a while, and then after the Reed Mine put that one up, then I think the children went to the Reed Mine. Della Underwood could probably tell you.

Swent: Yes, she mentioned going to school there.

McGinnis: The ones that had to go to high school, we had to room out someplace, like in Lower Lake. Where Charlie Boyd's two children--well, he eventually built a place in Lower Lake and they moved into that. And he traveled back and forth to the mine, so they could have a place to go to school. I can't remember whether any of the rest of them had any children that old to go to high school.

Swent: Was the teacher hired by the mine? Or was it part of the county system?

McGinnis: No, I think it was from the county. I really don't know for sure, but I imagine it would have been. The company might have had to pitch in. I don't know. Years ago, they had little schools all over the county, you know.

Swent: Yes, the one-room school house was a tradition, wasn't it?

McGinnis: They had a two-room one in Monticello.

Swent: Big city. [laughter]

McGinnis: Most of the time, there was only enough children for two rooms.

Swent: You said that at the Reed there were about a hundred people?

McGinnis: I would believe they were that many, and that many at Knoxville.

Swent: You mean a hundred workers? A hundred employees?

McGinnis: Well, no, all the people, families. And the workers. May have been more than that. I don't know.

Swent: That's a sizeable community.

McGinnis: Yes. But they worked three shifts, so they had quite a few people to operate the furnace and the mining operation.

Swent: Were most of the workers from right around here, in this county?

McGinnis: Well, a lot of them were, and a lot of them came in from wherever.

Swent: Were they foreigners?

McGinnis: No, no. No foreigners in the later times. In the early times, they had some Chinese, I think, at the Manhattan. I don't know about Reed Mine. From what I have read was they didn't have any Chinese at Knoxville. It seems like that's what I read.

Swent: I read that there were Chinese at Oat Hill.

McGinnis: Oh, there could have been.

Swent: Are there local stories about Chinese that stayed here?

McGinnis: Not that I can remember or hear about it. The Chinese worked at the mine and then at Monticello the Chinese had a laundry, but that was before my time. The one at Monticello, I remember that they had tong wars and he got killed in a tong war.

Swent: There were enough in Monticello to have a war?

McGinnis: Well, he must have belonged to one of them outfits. I don't know.

Swent: But there are no traces of them now? Nobody stayed?

McGinnis: No.

Swent: Chinese family or anything?

McGinnis: No.

Swent: Were there Mexicans?

McGinnis: Not very many Mexicans, up until the time they put grape vineyards at Berryessa. That's the first I can remember about any Mexicans in this country.

The Berryessa Family and Land Grant

Swent: I wondered if there were any that were left from the original Mexican days.

McGinnis: Yes, well, I have a deed to a ranch, a land grant, that was given to a Berryessa. I got a copy of a deed; one of the Berryessas gave a copy of it to my foreman, and he asked me if I'd have it, and I said, "Yes." So I took it. And it's six pages, and I never got anybody to read it to me yet.

Swent: Las Putas. Is that out at Putah Creek?

McGinnis: Yes. We had our Rancho Las Putas was up the other end of the valley. That was the main ranch, the Mexican ranch. They had three of them ranches in the valley. It was divided up in three pieces. Adobe buildings on them. Even till the day that the lake went in.

Swent: When you say you have the deed, does this mean you own the land?

McGinnis: No. No, it's just a souvenir.

Swent: Are there any of the Berryessas around today?

McGinnis: Yes, there are some. This person that I got the deed from, my friend, he was a Berryessa from down by San Jose. So there is still some of them around, though, or their relations. A lot of them were buried just where Spanish Flat is, a way out from there. There's a bunch of their relatives buried out there. Of course, they dug up everything they could find and moved everything up to Spanish Flat. There's quite a few of them. And a lot of others, too.

Swent: Were they working in the mines?

McGinnis: No, they was just on some of the ranches. After they sold that property off to the people that come in there wanting to buy it, the Americans, that's where they wound up, down at this lower end of the valley, and as far as I know, they had a little house up in there. But I don't know what happened to them after that.

Swent: The Berryessas?

McGinnis: Yes. There's different stories about that. A lot of them say they lost it gambling.

Swent: That happens.

McGinnis: It did.

Social Life at the Reed Mine

Swent: Speaking of gambling, what about that? Did people play poker?

McGinnis: I don't remember playing poker. But they did play a lot of pinochle. And them kind of card games. I don't really remember playing poker.

Swent: It was just the men? Or did the women play, too?

McGinnis: Well, the women played, too.

Swent: All together.

McGinnis: Yes, they were together, yes. That was one of the things they done. They played cards.

Swent: Of course, you had radio.

McGinnis: Yes, oh yes, we had radio.

Swent: Did people get together and dance?

McGinnis: Well, not at the mine that I can remember. When they went out, they danced at these bars and what have you.

Swent: Did they use the school room as a recreation place at all?

McGinnis: Not that I can remember. They could have, but I don't remember them doing that.

Swent: Was there any sort of central place to gather?

McGinnis: Well, not really.

Swent: Just in their houses.

McGinnis: In the houses, yes.

Swent: How did the women wash the clothes?

McGinnis: Well, they all had washers.

Swent: Did they? Electric?

McGinnis: Oh, yes, we had enough electricity out of the generators to take care of everything.

Swent: The company put in a sewage system, did they?

McGinnis: Yes. They had septic tanks. As far as I know; I didn't see anything.

Swent: Of course, you were young and probably didn't think much about it. But there must have been twenty-five or thirty houses?

McGinnis: There must have been twenty or twenty-five. There almost had to be, I think, at Knoxville and Reed.

Swent: That requires quite a little electricity and water and--

McGinnis: Well, I suppose there was twenty houses there. The Boyds' house and all that, yes. Took a lot of electricity.

Swent: There was a boarding house, too.

McGinnis: Oh, yes, because the single people all stayed in the boarding house.

Swent: You said the road wasn't very good out there.

McGinnis: No, it wasn't very good either way to Lake County or Monticello, either one of them in the wintertime, because of all the creeks you got to cross, going out from this way. And you had to watch out what you were doing there, it would get washed away. And if you're up there in Lake County, it was pretty rough that way.

Swent: And going from the road up to the mine!

McGinnis: Oh, yes. Well, they had that slag that they got out of the furnaces. They had tons and tons and tons of that stuff, and they just poured on the road there.

Swent: Made pretty good ballast, did it?

McGinnis: Yes.

Swent: Did the company run any kind of transportation service?

McGinnis: No.

Swent: Did you ride with one of their trucks or something?

McGinnis: Yes. They all had their own vehicles. And the single guys, I don't remember if they had their own vehicles. They just stayed there.

Swent: Were there telephones in the houses?

McGinnis: I can't remember of any telephones in them houses at the Reed Mine. But they did have a telephone line to the Knoxville. McKenzie's store had the telephone company, which was in Monticello, and they put in a line to Knoxville. I can remember that, because they just hung the wire on electric poles, you know.

Swent: Was there a telephone at all up at the Reed?

McGinnis: I don't know. I suppose there must have been, but I really can't remember. I suppose they did, yes. Now that you mentioned it.

Swent: What about mail?

McGinnis: The mail. As far as I know, we got the mail at the post office boxes in Monticello or Lower Lake. Of course, they did have a route that come part way. I can remember that. From Lake County towards Morgan Valley. Whether they brought that mail up for them or not, I don't know. I guess they could have.

Swent: Your dad worked up there quite a long time. Did he live up at the mine?

McGinnis: Yes.

Swent: Your mother moved up there?

McGinnis: No, my mother was already gone. He just stayed in the boarding house up there. And I think the people mostly probably got their mail at Monticello or Lower Lake.

Swent: When you were in the army, did you write letters to your dad?

McGinnis: Oh, yes.

Swent: Where did you write them to? Where did you address your dad?

McGinnis: To Monticello, to Reed Mine. Fact is, I still got a bunch of post cards I'm saving from Colorado Springs, when we first got back to the United States. I have still got that.

Swent: So they would have brought the mail to him, probably, from Monticello?

McGinnis: No, they come in and got it. They had to come in to get the mail.

Swent: And your girlfriend was in Monticello, too?

McGinnis: Well, not the one I married [Barbara Ruth Borges], no. They didn't come to Monticello until some time during the war, we got acquainted after I got home. We have artifacts from the Manhattan mine. [moving away from the microphone] I'll show you. Of course, there was a lot of these around, but most of them are broke.

Swent: What is this?

McGinnis: That's a beer bottle.

Swent: A ceramic beer bottle.

McGinnis: Yes, they was lots of them. Now I think that's about the only one.

Swent: I've never seen anything like that. How old would that be?

McGinnis: Well, I don't know. Pretty old. From back in the 1800s.

Swent: And that was the way the beer came. Ceramic bottles. It doesn't say where it's made or anything. There's no way of knowing.

McGinnis: No. I guess a bottle collector could tell you.

Swent: Probably. Well, that's very interesting.

McGinnis: Tell from the way that it's made. Like I say, there was a lot of them. Most of them are broke.

Swent: You mentioned here that when you got out of the army, George Davis (he was in the navy), and then when you got out you both went into a mine?

McGinnis: Davis came up for a visit, and we went on up to Reed Mine. He wanted to look where he used to work, and we walked in that mine for a little ways. Timbers down and everything had fallen, where you had to stoop over and walk in there. That ground was pretty heavy. I wouldn't say it would be safe to work in, but they did a lot of work in there.

Swent: Has it ever been re-opened since then?

McGinnis: No, I can't remember. I guess it did run for a while after the war was over, but I can't remember. Not too long.

Swent: There was a mercury boom in the early fifties, I think. Sometime around then. At the time of the Korean War, maybe.

McGinnis: Okay. It didn't close down. I'm pretty sure it operated during the Korean War, so I suppose it was still operating in the fifties.

Swent: You got acquainted with Bill Wilder at some point.

McGinnis: Yes.

Swent: When did you meet him?

McGinnis: On the road department. I talked to him quite a bit when he come up there. He came from a--I don't know. I think they got

a construction company someplace, and I think he had something near the New Almaden Mine down there. That was a real rich mine; I think he had something to do with that before he came up there.

Swent: What was your job with the county? What exactly were you doing?

McGinnis: Well, I wound up as a foreman for the crew took care of this part of the county. But I first went to work there just a laborer, and I became equipment operator.

Swent: So you were actually maintaining these roads.

McGinnis: Yes. We also had to maintain the Wooden Valley and Pope Valley.

Swent: That road up through Knoxville is quite a road, isn't it?

McGinnis: Yes, I don't know why. I always thought that Napa County made a mistake by not trying to persuade Homestake to come out this way, helping them improve their side of the lake. But they didn't on account of the crossing after the bridge was in.

Swent: And there are still fords in places there, aren't there?

McGinnis: Oh, yes.

Swent: A lot of crossings.

McGinnis: Yes. Eleven, I think.

Swent: They did put bridges on some of them, didn't they?

McGinnis: Those are just mostly concrete with a culvert. Probably take care of the water until it got so high that you better stay out of it.

Swent: You said you were hauling slag from some of these places.

McGinnis: We hauled slag from Manhattan to put on the road and also from Knoxville. It wasn't really the best. It took care of the mud somewhat.

The Gambles and the Knoxville Mine

Swent: Did you ever have any dealings with any of the Gambles?

McGinnis: Well, I knew George Gamble.

Swent: The father?

McGinnis: I knew him, too, but I knew the young George.

Swent: The rancher.

McGinnis: I knew him pretty well, yes. But he's probably sold that up there to Homestake, too. The Knoxville property.

Swent: Did young George ever work on the mining end of it at all?

McGinnis: No.

Swent: Just ranching?

McGinnis: Just the ranching, yes.

##

McGinnis: George's father and brother had something to do with the mine back then.

Swent: And I think they had had mines up around Alleghany first, hadn't they?

McGinnis: Well, I suppose. Bradley did. Charlie Boyd came from Alleghany gold mine down to the Reed Mine, too. He was mine superintendent. He's the one that hired me.

Swent: Did any of the Bradleys themselves ever come here to work at the Reed?

McGinnis: I don't believe so, no. I never knew it if they did. I mean, none of them ever worked there that I know of. They probably came down there, but--

Swent: They didn't actively manage it.

McGinnis: No.

Swent: Did the Gambles manage the Knoxville themselves, or did they have a manager?

McGinnis: They always had a manager also, but old George handled things himself for a long time up there. They had a mine superintendent also that took care--

Swent: What was his name, do you know?

McGinnis: I believe Scribner was one of the superintendents. They also came from Monticello. This one Scribner, I'm sure that he was the superintendent out in Knoxville Mine. Of course, he went to school for it and all that back in them days.

Swent: Morgan North worked around here. Did you know him?

McGinnis: Yes. He had something to do with Knoxville, running the mill. And there also was some Norths at Monticello; he was tied up with some of them, too. Well, I haven't thought about him in a long time.

Swent: What about Oat Hill?

McGinnis: I don't know much about Oat Hill. I've heard them talk about that Sulphur Bank mine quite a bit.

Swent: Then Wilbur Springs or Aetna.

McGinnis: Yes, Wilbur Springs, yes. The Aetna Mine is over in Pope Valley. I don't know, I guess it probably ran for a while. Another small one was up James Creek. I can't remember what they called that. They'd done some digging up there, too, during World War II.

Swent: You mentioned that you thought Wilder suspected that he had gold there?

McGinnis: Yes. Being as I worked for the county on that road, I was up around there every so often. I went by and here's a big drilling rig sitting out next to the county road, just this side of where they dug the big hole up there. They drilled a hole, and I asked Bill Wilder, "What are they doing that for?"

He said, "Oh, I'm checking for steam." And they drilled one hole out there, and one in there where they put the big pit, where they done all the digging, and that's where they hit the gold. Then, of course, they would not say anything about it, because they wanted to get all that land around it. And then it wasn't too long that Bill said the Homestake Mine--well, they bought him out. I've got a souvenir from that, too.

Swent: What do you have?

McGinnis: [shows t-shirt] Bill, he had a reason to celebrate.

Swent: Oh! "One-Shot Mining. Manhattan Mine." He had his own t-shirt made up.

McGinnis: That's what the old retorts looked like.

Swent: Gold on the gold color. So when did he have these made up?

McGinnis: After he sold the place.

Swent: After he made a lot of money.

McGinnis: Yes. Well, in the process of doing it, that's when he had these things made up.

Swent: Did he give them to all his friends?

McGinnis: Yes, oh, yes. Because he put in a lot of money and work in that place. And by the time he got the furnace and everything ready to go, the prices went down and it wasn't worth working, and all of his partners had left him except one old guy. I can't remember his name. The first thing he done was bought him a big mobile home over in Lake County and moved over there.

Swent: His partner, you mean.

McGinnis: Yes. So he worked for what he got. Of course, he made a lot.

Swent: Well, he had a business. For a while, he was processing batteries.

McGinnis: Oh, yes. I can remember that, too. Yes, mercury batteries.

Swent: Did any of you suspect that there was going to be gold there?

McGinnis: Well, we knew there was gold there. He knew there was gold there because he stopped us from hauling some of that slag. He said, "Hey, fellows, you can't haul any more of that; there's gold in it."

Swent: This was before Homestake came in?

McGinnis: Yes. I guess it was so fine that there wasn't no really--didn't know how to get it out of there, you know?

Swent: But he had told you not to haul some of that slag.

McGinnis: Oh, yes. He told the county not to haul. But he showed us where to get it from. Some of that stuff was run through the old retorts, and I guess they got enough to build a mill or something. I don't know. But he never, you know, did anything with it because he didn't, couldn't. But that's the only time I know of that they knew there was gold there was him, so I thought some of the others must have, if they had an assay.

Swent: Well, it brought a lot of changes to that part of the county.

McGinnis: Oh, it sure did! Yes. I just wish I had taken pictures of that place before and afterwards. They called it San Quentin where the mercury and stuff was made to come up. That's where they dug the most digging in olden times. They had that all honeycombed down in that big hole, and down at the bottom they had a tramway brought in where they took the ore out from the bottom. The ore went right over to these retorts. But they sure done a lot of hard digging!

Swent: Do you think it's any better now than it used to be?

McGinnis: Well, as far as I know, it don't have any effect on me. I don't know if it does anybody out there, really. They changed it so it looks different, but I don't know if it made any difference.

Swent: Now they're starting to talk about closing it down.

McGinnis: Yes.

Swent: Another ten years, and it will be all done, I guess.

McGinnis: Yes, I guess they did a pretty good job of taking care of water and stuff, but I don't know. I don't think they're contaminating anything. I don't know.

Swent: It has brought quite a little tax money into Napa County, hasn't it?

McGinnis: Yes. As far as I know, yes.

Swent: I imagine. I think the mine itself is in Napa County.

McGinnis: Yes. Yes, that's in Napa County. Where all that drainage on Hunting Creek is, that's Napa County, also. To Putah Creek. The Reed Mine is in Yolo County.

Swent: Yes. Well, I think they've cleaned that up, haven't they?

McGinnis: Yes. Well, I suppose, yes. My son-in-law worked on that. I think he got pictures. Ought to ask him. When they was building that dam in there for the reservoir.

Swent: On the Davis Creek?

McGinnis: Yes. That's what he worked on. For one of the contractors for Manhattan Mine operating equipment when they was getting ready to build the roads and dam and that stuff. And when they got that all done, well, he quit.

Swent: What's your son-in-law's name?

McGinnis: Well, he's my ex-son-in-law now! King is his last name. Doug King. I was up there with him one time and I know he took some pictures. We took pictures over where the Reed mine was, where the houses were. So I have to see if I can get them pictures. But I don't think there's much there to see, except for the foundations. What I understand is a fire came through there. I think that's what happened to the stuff up on the hill, and maybe the houses, too.

Swent: Yes, that often happens. Well, there won't be much fire danger this spring.

McGinnis: No.

Swent: That's one thing about this rain.

McGinnis: I don't know. It makes all the foliage grow more.

Swent: That's true.

McGinnis: You got more fuel. There's two ways to look at it.

Swent: You said the road today from Berryessa up to Knoxville, that road would be flooded out, I suppose.

McGinnis: Oh, yes.

Swent: Couldn't get through.

McGinnis: And they also got a big slide up there someplace.

Swent: Well, you've answered all the questions that I had. Is there anything else you'd like to say, Ed?

McGinnis: No, not really.

Swent: Okay. I think we pretty well covered everything. Unless you can remember anything else.

McGinnis: No, not really. I can see if I can get this number. What's the name?

Swent: Boyd?

McGinnis: Boyd's son's telephone number. I'll call her up and ask her if she's got it.

Swent: She might. And you said that MacDonald had worked at--

McGinnis: He worked at the Knoxville Mine.

Swent: At the Knoxville.

McGinnis: As equipment operator. He didn't work underground, but he was there for a long time.

Swent: I did have one more question about the Reed shop, where your dad worked. Were the shops going all around the clock, too? Three shifts? Were they sharpening drills at night?

McGinnis: No, no.

Swent: No. That was just days.

McGinnis: They just--they did have somebody, though, three shifts, that came there to take care of work orders.

Swent: So the retort and the mine, or the furnace and the mine worked all the time.

McGinnis: Yes.

Swent: It was a good operation. Holidays? Fourth of July and everything?

McGinnis: Well, yes. Weekends, everything.

Swent: But the people worked a six-day week?

McGinnis: I don't know just how they done that. I was thinking I don't know if it was six-day or five, but they had to do it so they could keep it operating full time. I know that. I think it must have been six-day week.

Swent: Probably.

McGinnis: That's what a blacksmith would work, six days.

Swent: And a carpenter? He worked six days, too?

McGinnis: Yes. Well, I hope I've been of some--

Swent: I've enjoyed this. It's very interesting to hear about what used to go on. People worked pretty hard in those days.

McGinnis: Well, yes. Well, like I say, that was just getting out of the Depression. People was really looking for jobs about that time!

Swent: Yes. Cash was hard to come by.

McGinnis: Yes.

Swent: At the Bancroft Library there's a little box of papers that belonged to Morgan North, and I looked at those, and there were letters. He was operating a mine called La Joya at that time, over at Oakville. And there were letters in there from school friends of his. This is about 1933 or '34, from friends of his who were absolutely broke, and they wanted jobs, and one of them wrote to him and said he wanted to come and work for him. But he said, "You'll have to send me money to get there. I don't have a quarter to get there." But he would work for him if he could send him enough money to get in there.

McGinnis: Yes, I was up to that mine one night.

Swent: La Joya?

McGinnis: My friend and I went up there. His brother [Bud Davis, George's brother] and stepfather was working at the La Joya. Well, he was working there, and his mother was up there, too. Lived with him. We went up there to see them. That was the only time I was ever there. But I don't know how much they did during the war. I guess they must have been operating during the war because that's when we went up there, just at the start of World War II.

Swent: There was another mine called the Helen Mine.

McGinnis: I don't know.

Swent: And Morgan North worked there, too.

McGinnis: I don't remember that one.

Swent: Do you think that this man's mother was working in the mine also? The wife was helping?

McGinnis: No, she wasn't. She was just up there.

Swent: I see. Did any women help in the mines?

McGinnis: No. No, I don't think that you should really call that working.

Swent: No, you don't usually hear of women working in mines then.

McGinnis: No. I don't think they would hear of any women in these mines.

Swent: No. Well, the Depression was a hard time for a lot of people.

McGinnis: Yes.

Swent: Well, I think maybe that about does it?

McGinnis: Well, I guess.

Swent: All right.

McGinnis: Unless you can think of something else.

Swent: No, I really can't. I think we've covered everything. Thank you very much.

Transcriber: Mim Eisenberg
Final Typist: Amelia Archer

TAPE GUIDE--Knoxville/McLaughlin Mine, Volume V

INTERVIEW WITH WILLIAM KRITIKOS

Date of Interview: September 25, 1994
Tape 1, Side A 1
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INTERVIEW WITH JACK LANDMAN

Date of Interview: June 1, 1996
Tape 1, Side A 61
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INTERVIEW WITH ROBERTA LYONS

Date of Interview: March 26, 1997
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Tape 1, Side B 111
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INTERVIEW WITH ROGER MADSEN

Interview 1: November 18, 1994
Tape 1, Side A 150
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Interview 2: November 19, 1994
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INTERVIEW WITH BEVERLY MAGOON

Date of Interview: May 31, 1996
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Tape 1, Side B 214
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INTERVIEW WITH EDWARD MCGINNIS

Date of Interview: March 15, 1995
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PREFACE--Western Mining in the Twentieth Century

The oral history series on Western Mining in the Twentieth Century documents the lives of leaders in mining, metallurgy, geology, education in the earth and materials sciences, mining law, and the pertinent government bodies. The field includes metal, non-metal, and industrial minerals. In its tenth year the series numbers thirty-five volumes completed and others in process.

Mining has changed greatly in this century: in the technology and technical education; in the organization of corporations; in the perception of the national strategic importance of minerals; in the labor movement; and in consideration of health and environmental effects of mining.

The idea of an oral history series to document these developments in twentieth century mining had been on the drawing board of the Regional Oral History Office for more than twenty years. The project finally got underway on January 25, 1986, when Mrs. Willa Baum, Mr. and Mrs. Philip Bradley, Professor and Mrs. Douglas Fuerstenau, Mr. and Mrs. Clifford Heimbucher, Mrs. Donald McLaughlin, and Mr. and Mrs. Langan Swent met at the Swent home to plan the project, and Professor Fuerstenau agreed to serve as Principal Investigator.

An advisory committee was selected which included representatives from the materials science and mineral engineering faculty and a professor of history of science at the University of California at Berkeley; a professor emeritus of history from the California Institute of Technology; and executives of mining companies. Langan Swent delighted in referring to himself as "technical advisor" to the series. He abetted the project from the beginning, directly with his wise counsel and store of information, and indirectly by his patience as the oral histories took more and more of his wife's time and attention. He completed the review of his own oral history transcript when he was in the hospital just before his death in 1992. As some of the original advisors have died, others have been added to help in selecting interviewees, suggesting research topics, and securing funds.

The project was presented to the San Francisco section of the American Institute of Mining, Metallurgical, and Petroleum Engineers (AIME) on "Old-timers Night," March 10, 1986, when Philip Read Bradley, Jr., was the speaker. This section and the Southern California section of AIME provided initial funding and organizational sponsorship.

The Northern and Southern California sections of the Woman's Auxiliary to the AIME (WAAIME), the California Mining Association, and the Mining and Metallurgical Society of America (MMSA) were early supporters. Later the National Mining Association became a sponsor. The

project was significantly advanced by a generous bequest received in November 1997 upon the death of J. Ward Downey, UC Berkeley alumnus and early member of the mining series advisory committee. His own oral history was completed in 1992. Other individual and corporate donors are listed in the volumes. Sponsors to date include nineteen corporations, four foundations, and 113 individuals. The project is ongoing, and funds continue to be sought.

The first five interviewees were all born in 1904 or earlier. Horace Albright, mining lawyer and president of United States Potash Company, was ninety-six years old when interviewed. Although brief, this interview adds another dimension to a man known primarily as a conservationist.

James Boyd was director of the industry division of the military government of Germany after World War II, director of the U.S. Bureau of Mines, dean of the Colorado School of Mines, vice president of Kennecott Copper Corporation, president of Copper Range, and executive director of the National Commission on Materials Policy. He had reviewed the transcript of his lengthy oral history just before his death in November, 1987. In 1990, he was inducted into the National Mining Hall of Fame, Leadville, Colorado.

Philip Bradley, Jr., mining engineer, was a member of the California Mining Board for thirty-two years, most of them as chairman. He also founded the parent organization of the California Mining Association, as well as the Western Governors Mining Advisory Council. His uncle, Frederick Worthen Bradley, who figures in the oral history, was in the first group inducted into the National Mining Hall of Fame in 1988.

Frank McQuiston, metallurgist for the Raw Materials Division of the Atomic Energy Commission and vice president of Newmont Mining Corporation, died before his oral history was complete; thirteen hours of taped interviews with him were supplemented by three hours with his friend and associate, Robert Shoemaker.

Gordon Oakeshott, geologist, was president of the National Association of Geology Teachers and chief of the California Division of Mines and Geology.

These oral histories establish the framework for the series; subsequent oral histories amplify the basic themes. After over thirty individual biographical oral histories were completed, a community oral history was undertaken, documenting the development of the McLaughlin gold mine in the Napa, Yolo, and Lake Counties of California (the historic Knoxville mercury mining district), and the resulting changes in the surrounding communities. This comprises forty-three interviews.

Future researchers will turn to these oral histories to learn how decisions were made which led to changes in mining engineering education, corporate structures, and technology, as well as public policy regarding

minerals. In addition, the interviews stimulate the deposit, by interviewees and others, of a number of documents, photographs, memoirs, and other materials related to twentieth century mining in the West. This collection is being added to The Bancroft Library's extensive holdings. A list of completed and in process interviews for the mining series appears at the end of this volume.

The Regional Oral History Office is under the direction of Willa Baum, division head, and under the administrative direction of The Bancroft Library.

Interviews were conducted by Malca Chall and Eleanor Swent.

Willa K. Baum, Division Head
Regional Oral History Office

Eleanor Swent, Project Director
Western Mining in the Twentieth
Century Series

January 1998
Regional Oral History Office
University of California, Berkeley

Western Mining in the Twentieth Century Oral History Series

Interviews Completed, March 1999

Horace Albright, *Mining Lawyer and Executive, U.S. Potash Company, U.S. Borax, 1933-1962*, 1989

Samuel S. Arentz, Jr., *Mining Engineer, Consultant, and Entrepreneur in Nevada and Utah, 1934-1992*, 1993

James Boyd, *Minerals and Critical Materials Management: Military and Government Administrator and Mining Executive, 1941-1987*, 1988

Philip Read Bradley, Jr., *A Mining Engineer in Alaska, Canada, the Western United States, Latin America, and Southeast Asia*, 1988

Catherine C. Campbell, *Ian and Catherine Campbell, Geologists: Teaching, Government Service, Editing*, 1989

William Clark, *Reporting on California's Gold Mines for the State Division of Mines and Geology, 1951-1979*, 1993

Norman Cleaveland, *Dredge Mining for Gold, Malaysian Tin, Diamonds, 1921-1966; Exposing the 1883 Murder of William Raymond Morley*, 1995

James T. Curry, Sr., *Metallurgist for Empire Star Mine and Newmont Exploration, 1932-1955; Plant Manager for Calaveras Cement Company, 1956-1975*, 1990

Donald Dickey, *The Oriental Mine, 1938-1991*, 1996

J. Ward Downey, *Mining and Construction Engineer, Industrial Management Consultant, 1936 to the 1990s*, 1992

Warren Fenzi, *Junior Engineer to President, Director of Phelps Dodge, 1937 to 1984*, 1996

Hedley S. "Pete" Fowler, *Mining Engineer in the Americas, India, and Africa, 1933-1983*, 1992

James Mack Gerstley, *Executive, U.S. Borax & Chemical Corporation; Trustee, Pomona College; Civic Leader, San Francisco Asian Art Museum*, 1991

Robert M. Haldeman, *Managing Copper Mines in Chile: Braden, CODELCO, Minerec, Pudahuel; Developing Controlled Bacterial Leaching of Copper from Sulfide Ores; 1941-1993*, 1995

John F. Havard, *Mining Engineer and Executive, 1935-1981*, 1992

Wayne Hazen, *Plutonium Technology Applied to Mineral Processing; Solvent Extraction; Building Hazen Research; 1940-1993*, 1995

George Heikes, *Mining Geologist on Four Continents, 1924-1974*, 1992

Helen R. Henshaw, *Recollections of Life with Paul Henshaw: Latin America, Homestake Mining Company*, 1988

Homestake Mine Workers, Lead, South Dakota, 1929-1993, interviews with Clarence Kravig, Wayne Harford, and Kenneth Kinghorn, 1995

Lewis L. Huelsdonk, *Manager of Gold and Chrome Mines, Spokesman for Gold Mining, 1935-1974*, 1988

William Humphrey, *Mining Operations and Engineering Executive for Anaconda, Newmont, Homestake, 1950 to 1995*, 1996

James Jensen, *Chemical and Metallurgical Process Engineer: Making Deuterium, Extracting Salines and Base and Heavy Metals, 1938-1990s*, 1993

Arthur I. Johnson, *Mining and Metallurgical Engineer in the Black Hills: Pegmatites and Rare Minerals, 1922 to the 1990s*, 1990

G. Frank Joklik, *Exploration Geologist, Developer of Mt. Newman, President and CEO of Kennecott, 1949-1996; Chairman, Salt Lake 2002 Olympic Winter Games Committee*, 1997

Evan Just, *Geologist: Engineering and Mining Journal, Marshall Plan, Cyprus Mines Corporation, and Stanford University, 1922-1980*, 1989

Robert Kendall, *Mining Borax, Shaft-Freezing in Potash Mines, U.S. Borax, Inc., 1954-1988*, 1994

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, 1978-1995, Volume I, 1998

Anderson, James, "Homestake Vice President-Exploration"
Baker, Will, "Citizen Activist, Yolo County"
Birdsey, Norman, "Metallurgical Technician, McLaughlin Process Plant"
Bledsoe, Brice, "Director, Solano Irrigation District"

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, 1978-1995, Volume II, 1998

Cerar, Anthony, "Mercury Miner, 1935-1995"
Ceteras, John, "Organic Farmer, Yolo County"
Conger, Harry, "President, Chairman, and CEO, Homestake Mining Company, 1977 to 1994"
Corley, John Jay, "Chairman, Napa County Planning Commission, 1981-1985"
Cornelison, William, "Superintendent of Schools, Lake County" (Includes an interview with John A. Drummond, Lake County Schools Attorney)

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, 1978-1995, Volume III, 1998

Crouch, David, "Homestake Corporate Manager-Environmental Affairs"
Enderlin, Elmer, "Miner in Fifty-Eight Mines"
Fuller, Claire, "Fuller's Superette Market, Lower Lake"
Goldstein, Dennis, "Homestake Corporate Lawyer"
Guinivere, Rex, "Homestake Vice President-Engineering"

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, 1978-1995, Volume IV, 1998

Gustafson, Donald, "Homestake Exploration Geologist"
Hanchett, Bonnie, "Owner and Editor, Clearlake Observer"
Hickey, James, "Director, Napa County Planning Department"
Jago, Irene, "Lower Lake High School Teacher"
Jonas, James, "Bulk Fuel Plant Owner, Lower Lake"
Koontz, Dolora, "Environmental Engineer, McLaughlin Mine"

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, 1978-1997, Volume V, 1999

Kritikos, William, "Operator, Oat Hill Mine"
Landman, John, "Rancher, Morgan Valley"
Lyons, Roberta, "Journalist and Environmentalist"
Madsen, Roger, "Homestake Mechanical Engineer"
Magoon, Beverly, "Merchant and Craft Instructor, Lower Lake"
McGinnis, Edward, "Worker at the Reed Mine"

Marian Lane, *Mine Doctor's Wife in Mexico During the 1920s*, 1996

Plato Malozemoff, *A Life in Mining: Siberia to Chairman of Newmont Mining Corporation, 1909-1985*, 1990

James and Malcolm McPherson, *Brothers in Mining*, 1992

Frank Woods McQuiston, Jr., *Metallurgist for Newmont Mining Corporation and U.S. Atomic Energy Commission, 1934-1982*, 1989

Gordon B. Oakeshott, *The California Division of Mines and Geology, 1948-1974*, 1988

James H. Orr, *An Entrepreneur in Mining in North and South America, 1930s to 1990s*, 1995

Vincent D. Perry, *A Half Century as Mining and Exploration Geologist with the Anaconda Company*, 1991

Carl Randolph, *Research Manager to President, U.S. Borax & Chemical Corporation, 1957-1986*, 1992

John Reed, *Pioneer in Applied Rock Mechanics, Braden Mine, Chile, 1944-1950; St. Joseph Lead Company, 1955-1960; Colorado School of Mines, 1960-1972*, 1993

Joseph Rosenblatt, *EIMCO, Pioneer in Underground Mining Machinery and Process Equipment, 1926-1963*, 1992

Eugene David Smith, *Working on the Twenty-Mule Team: Laborer to Vice President, U.S. Borax & Chemical Corporation, 1941-1989*, 1993

Simon Strauss, *Market Analyst for Non-ferrous Metals and Non-metallic Minerals, Journalist, Mining Corporation Executive, 1927-1994*, 1995

Langan W. Swent, *Working for Safety and Health in Underground Mines: San Luis and Homestake Mining Companies, 1946-1988*, 1995

James V. Thompson, *Mining and Metallurgical Engineer: the Philippine Islands; Dorr, Humphreys, Kaiser Engineers Companies; 1940-1990s*, 1992

William Wilder, *Owner of One Shot Mining Company: Manhattan Mercury Mine, 1965-1981*, 1996

Interviews In Process

Robert Clarkson, Clarkson Company
John Livermore, geologist
David Lowell, geologist
Alexander Wilson, BHP-Utah Minerals

Knoxville/McLaughlin Interviews in Process:
Krauss, Raymond, "Environmental Manager, McLaughlin Mine"
McKenzie, Robert, "Photographer and Local Historian, Napa County"
Moskowite, Harold, "County Supervisor, Napa County"
Onstad, Marion, "Morgan Valley Rancher, Homestake Secretary"
Parker, Ronald, "General Manager, McLaughlin Mine, 1988-1994"
Purtell, Patrick, "General Manager, McLaughlin Mine, 1994"
Stoehr, Richard, "Homestake Vice President and Director"
Strapko, Joseph, "Homestake Field Geologist"
Thompson, Jack, "General Manager, McLaughlin Mine, 1981-1988"
Thompson, Twyla, "County Supervisor, Yolo County"
Tindell, Avery, "Capay Valley Environmentalist"
Turney, John, "McLaughlin Metallurgist: Pioneering Autoclaving for Gold"
Underwood, Della, "Knoxville Rancher, McLaughlin Mine Surveyor"
Wilcox, Walter, "County Supervisor, Lake County"

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